Vol. 75 [illegible]

What are ginners having
to do to mechanically-
picked cotton before it
reaches the mill? See
Leo Gerdes' discussion
on Pages 39 through 46.

L.U.N.C.
Commerce R. R.
AUG 3-0 1949

textile bulletin

AUGUST • 1949

Sectional INDEX

Watching Washington 18
What Others Are-Saying 31
Editorials 34
Opening, Picking Carding & Spinning . 49
Warp Preparation & Weaving 57
Maintenance & Engineering 65
Bleaching, Dyeing & Finishing 69
Personal News & Obituaries 73
Mill News 77
[illegible] The Textile Industry's use 73
Southern Sources Of Supply 98
Classified Advertising 106

Textile Bulletin is published monthly by Clark Publishing Co., 218 West Morehead St., Charlotte 2, N. C. Subscription $1.50 per year in advance, $3 for three years. Entered as second-class mail matter March 2, 1911, at Postoffice, Charlotte, N. C., under Act of Congress, March 2, 1897.

Only the lap . . .
ROLLS ON BALLS

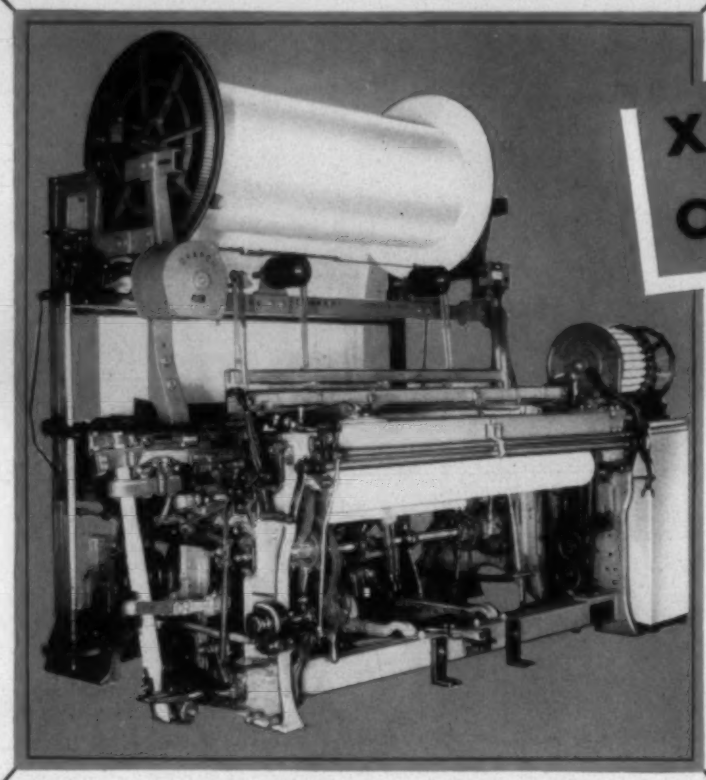
PRECISION
Ball Bearing
LAP PINS

• No Drag • Easier Handling • Better Laps

Better laps mean better yarn. PRECISION Lap Pins help to obtain superior laps—with fewer thick and thin spots, perfectly squared ends and easier unwinding on cards, later. This, because your laps "roll" WITHOUT DRAG on ball bearings—the 4 Lifetime sealed bearings (Pre-lubricated) in the outer revolving tube of the Lap Pin. Since the special alloy steel shaft never turns, there is no clogging or wear on (or even need for) usual loggerhead rolls. Outer tube is seamless Steel tubing finely taper ground and hard chrome plated for smooth lap removal and long life. Reasonably, this is true economy, and better quality laps continue to pay off throughout the processing. For full information, call for a PRECISION Sales Engineer, now!

For better Saco-Lowell and Kitson Picker performance, ask also about PRECISION'S "Big 6" Picker improvements: (1) Main calender roll drive; (2) Evener cone drive; (3) 21 Tooth bottom calender roll gear; (4) Apron feed roll drive; (5) Fluted calender roll drive; (6) Vertical calender rolls with ball bearings. These are PRECISION-Guaranteed improvements, backed by over 20 years of Textile Engineering.

PG
PRECISION
GEAR AND MACHINE CO.
2001 NORTH TRYON STREET, CHARLOTTE, N. C.



X2 LOOM-with OVERHEAD BEAM

- ★ *32" Beam holds 120% more yarn than a 22" Beam!*
- ★ *Cuts Slashing Costs!*
- ★ *Decreases End Waste!*

Larger warp packages cut down slashing, drawing-in, and warp handling costs. The Draper overhead beam installation enables you to adopt larger yarn beams without eliminating any looms, as a loom with a 32″ beam in the overhead position occupies the same floor space as one with a 22″ beam in the conventional position.

Developed for the X-2, X, and E Model looms the 32″ overhead beam holds 120.6% more yarn than the 22″ beam. Think what this means to your mill—longer runs for warps and thus less down time for your looms, production rises—costs fall.

Weaving conditions are improved because with the overhead beam installation, "warp stretch" is increased and "warp jumping" due to worn bearings is eliminated. Warps are kept clean because they are high and away from nearby looms when the standard blowing-off system most mills employ is in operation. Used in connection with an overhead monorail, the loom fixer's job of putting in the beam is simplified.

Can you afford to overlook a way to cut costs and increase production at the same time? The Draper overhead beam is your answer if you are weaving coarse greige goods.

D

DRAPER CORPORATION

HOPEDALE MASSACHUSETTS U. S. A.

COMMERCIAL FACTORS CORPORATION

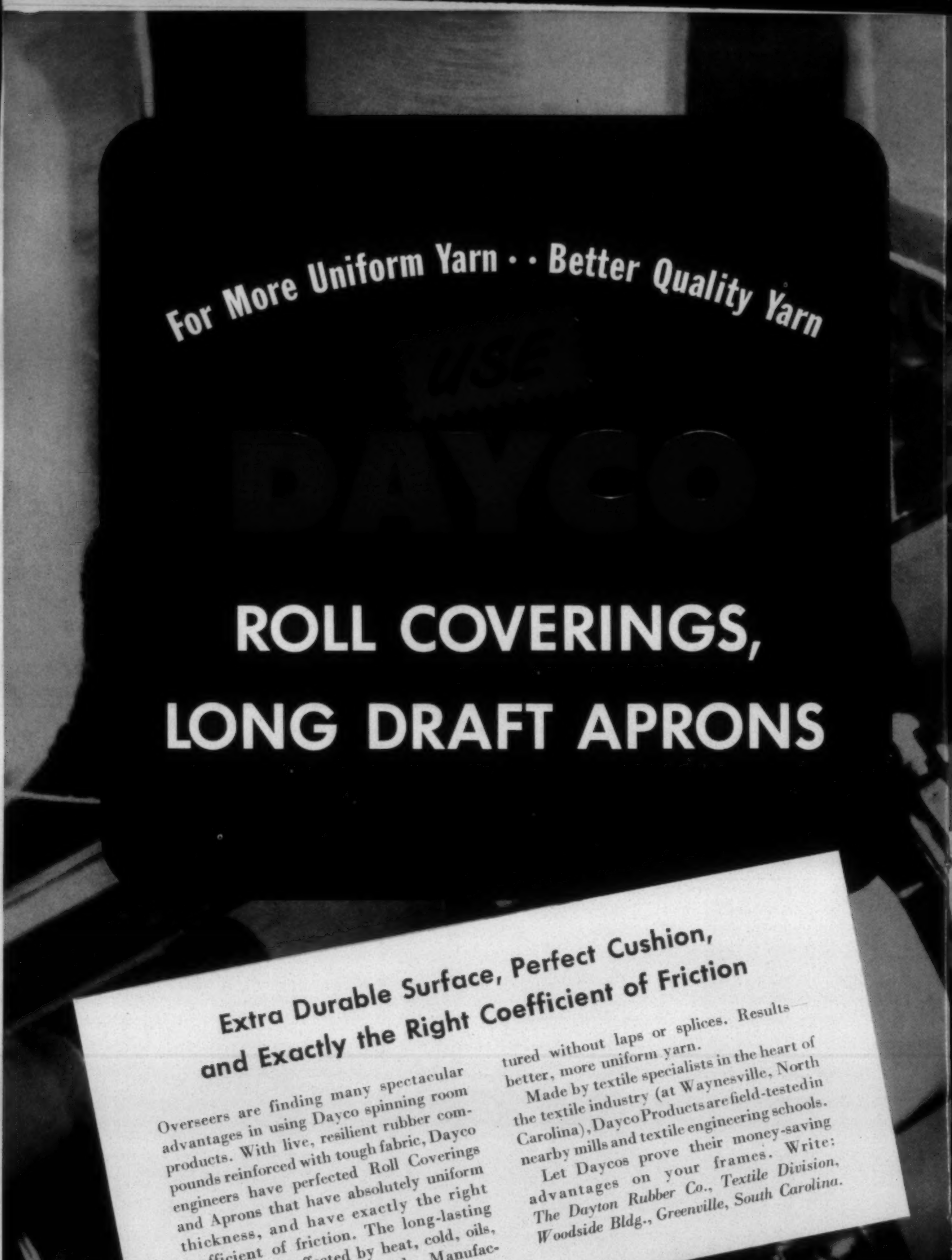
Fred'k Vietor & Achelis, Inc.
Established 1828

Schefer, Schramm & Vogel
Established 1838

Peierls, Buhler & Co., Inc.
Established 1893

TWO PARK AVENUE, NEW YORK, 16

EUGENE G. LYNCH, 80 FEDERAL STREET, BOSTON 10, MASS.
T. HOLT HAYWOOD, WINSTON-SALEM, NORTH CAROLINA



For More Uniform Yarn · · Better Quality Yarn

USE

DAYCO

ROLL COVERINGS,

LONG DRAFT APRONS

Extra Durable Surface, Perfect Cushion, and Exactly the Right Coefficient of Friction

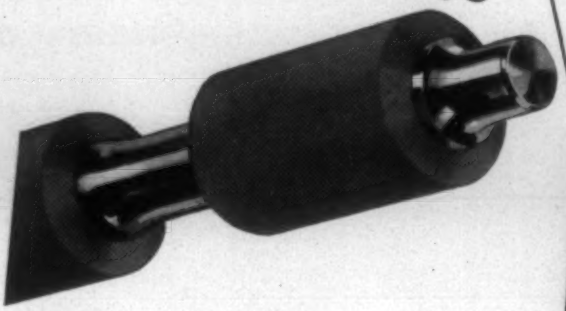
Overseers are finding many spectacular advantages in using Dayco spinning room products. With live, resilient rubber compounds reinforced with tough fabric, Dayco engineers have perfected Roll Coverings and Aprons that have absolutely uniform thickness, and have exactly the right coefficient of friction. The long-lasting surface is not affected by heat, cold, oils, humidity, dyes or hard ends. Manufactured without laps or splices. Results—better, more uniform yarn.

Made by textile specialists in the heart of the textile industry (at Waynesville, North Carolina), Dayco Products are field-tested in nearby mills and textile engineering schools.

Let Daycos prove their money-saving advantages on your frames. Write: *The Dayton Rubber Co., Textile Division, Woodside Bldg., Greenville, South Carolina.*

8 reasons why you should use

DAYCO ROLL COVERINGS



1. Reduce number of ends down. Minimize lapping up.
2. Permit changing of yarn numbers without rebuffing.
3. Equally efficient for natural and synthetic fibers and synthetic blends.
4. Static-free. Reduce eyebrowing.
5. Easy to apply. One-piece construction.
6. Oil-proof. Won't swell.
7. Not affected by humidity or temperature change.
8. No grooving. Long life.

Type "C" for revolving clearers.
Type "S" for flat clearers.

DAYCOS WIN COMPARISON TEST

In a North Carolina mill, Dayco Roll Coverings were tested against two other types of roll coverings for 1000 spindle hours. On ends down, the Daycos performed 27.7% better than one and 34.4% better than the other. Also, the Daycos had fewer lap ups.

MORE PROOF

In a South Carolina mill, running 20's warp rayon yarn, competitive tests were run for two days on new two-apron spinning frames with revolving top clearers. The frames using Dayco Roll Coverings had 35.8% fewer unclassified ends down than the frames using another type of roll covering. Also, the Daycos showed no grooving from hard ends, and no lap ups on the top rolls.

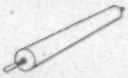
6 Reasons why you should standardize on Dayco

LONG DRAFT APRONS

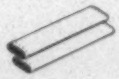
1. Won't curl, split, crack, break, distort, stretch or groove.
2. Won't flip off. Won't pick up lint.
3. White drafting surface keeps yarn clean.
4. Will handle natural and synthetic fibers.
5. Nondirectional. Unaffected by hard ends.
6. Uniform thickness. No laps or splices. Smooth inside without ribs.

MORE DAYCO SPINNING ROOM PRODUCTS

Woolen and Worsted Cots. Give years of service. Insure more uniform spinning, with less matching-up.



Slasher Rolls. Insure more uniform sizing. Last longer. Not affected by starch.



Rub Aprons last longer. Stay put. Insure more uniform rubbing.

Condenser Tape. No stretch. Won't pick up lint. Less tendency to twist.

Sponge Cone Pads. Extra resiliency protects yarn.

Dayton Rubber

Since 1942

A NEW WORD

has been added to our glossary of technical terms

SACO-LOWELLize

Put this new word into your own dictionary of textile terminology

. . . AND HERE IS WHAT IT MEANS

SACO-LOWELLize (*verb*)

(A) To utilize floor space so as to improve the flow of production.

(B) To co-ordinate the successive steps in processing.

(C) To reduce waste, spoilage, and unnecessary handling of stock.

(D) To realize the greatest economies in operating and maintenance costs.

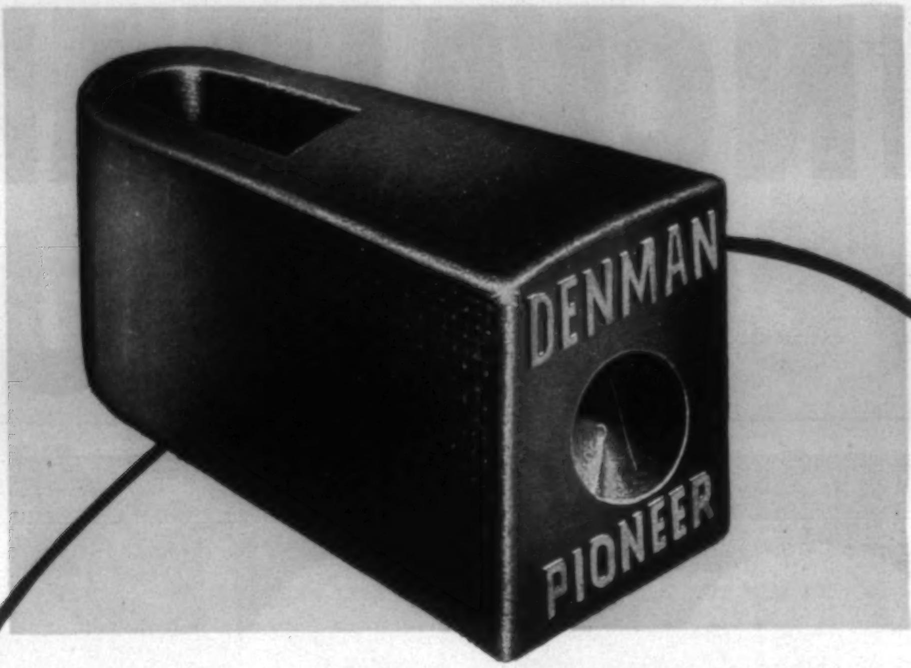
These four steps in SACO-LOWELLizing can mean a great deal to any mill, for SACO-LOWELLizing is a sure way to profit. An analysis of your mill, from the engineering and management viewpoint expressed in this definition, may reveal opportunities for improved methods, lower costs, and reduction in waste.

You are invited to call in a Saco-Lowell engineer to discuss this important subject. Your inquiry, directed to our nearest Sales Office, will receive prompt attention.

SACO-LOWELL

60 BATTERYMARCH STREET, BOSTON 10, MASS.
Shops at BIDDEFORD, MAINE *and* SANFORD, N. C.

SALES OFFICES: CHARLOTTE • GREENVILLE • ATLANTA



WHAT **MAKES** THIS THE *LARGEST SELLING* PICKER ?

More mills use Denman Pioneer than any other make picker because:

1st

Denman and Terrell developed the rubberized fabric picker. We know this field and we are the first to furnish the very latest and best improvements in pickers and other loom parts.

2nd

Mills get longer picker and shuttle life through the specialized service of Terrell field men who fit Denman Pioneer Pickers to your individual loom requirements.

Mill men know from experience that Denman loom parts provide Lowest Cost Per Loom Per Year.

MADE BY

Denman Tire & Rubber Co.

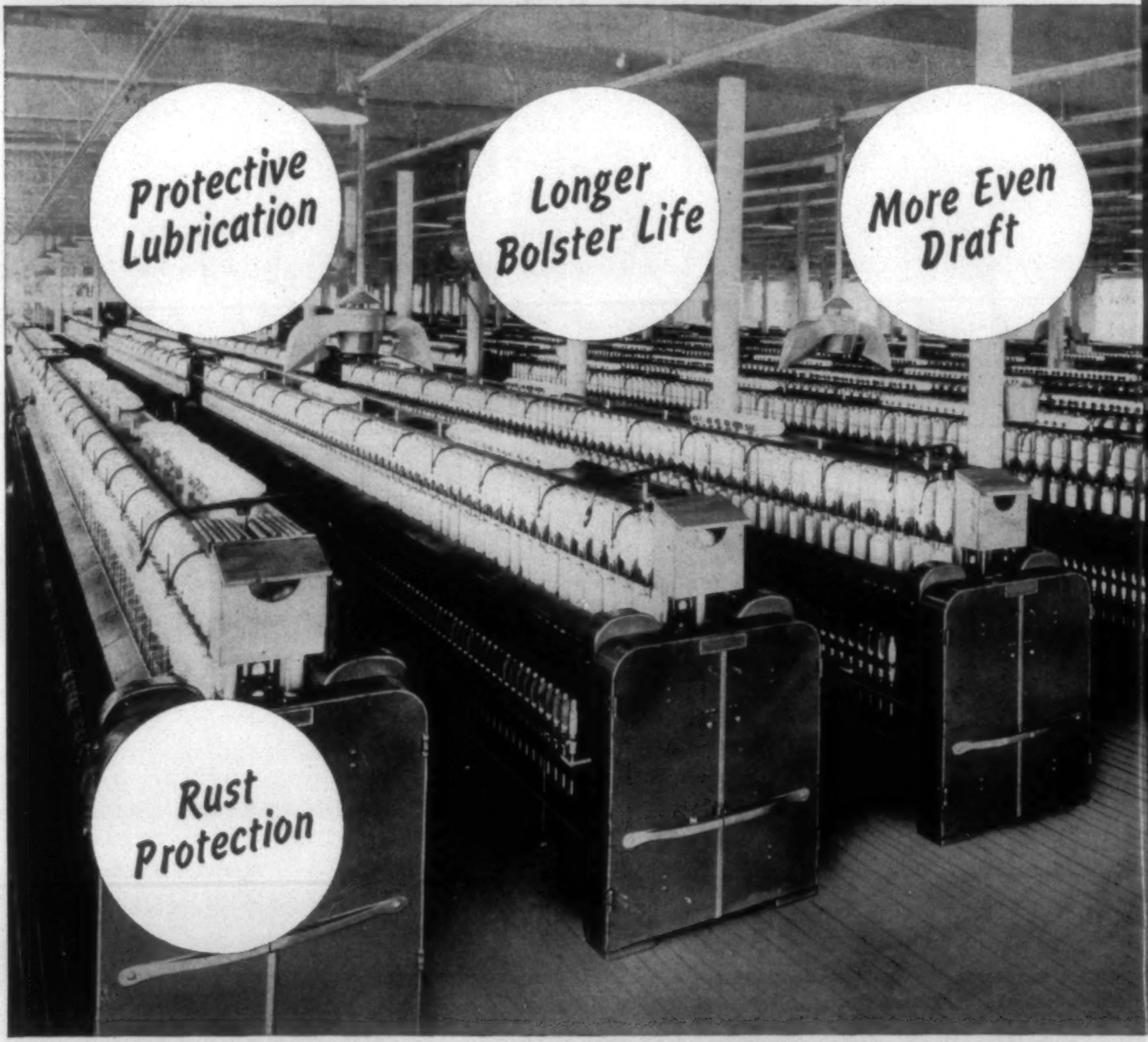
watch DENMAN for the best first

Exclusive Sales Representative

The TERRELL COMPANY, Inc.

CHARLOTTE, N. C.

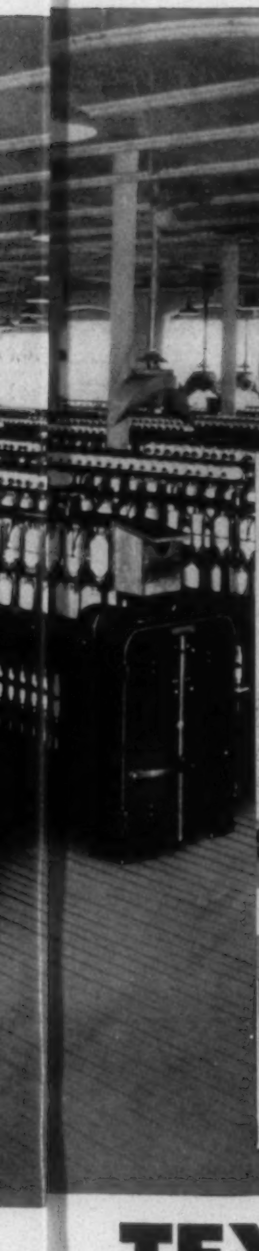
SINCLAIR LILY
REDUCE



SINCLAIR

YOUR NEAREST SINCLAIR AGENT WILL GLADLY ARRANGE

WHITE OILS
POWER COSTS



One of the major concerns in a textile mill is high power costs. Just a little friction drag on each spindle, multiplied in thousands and thousands of spindles, builds up the power load and power cost.

By the use of LILY WHITE Spindle Oils AX, BX and CX these high power costs can be kept down. These oils meet the modern demand imposed by heavier packages and higher speeds. LILY WHITE Oils provide improved lubrication that has resulted in reduction of wear up to two-thirds of previous experience. Less wear reflects less friction. Less friction means reduced power costs. LILY WHITE is a power-saving oil.

Continual research explains the high quality of LILY WHITE and other Sinclair Oils. Sinclair has recently completed at Harvey, Ill., one of the most modern and complete laboratories for petroleum research and development.

E. W. Isom, Sinclair Vice-President in Charge of Research says: "With the new facilities now made available to us at Harvey, Ill., we expect to find many ways to help industry cut costs through better petroleum products."

TEXTILE LUBRICANTS

FOR LUBRICATION COUNSEL, OR YOU MAY WRITE TO SINCLAIR REFINING COMPANY, 630 FIFTH AVE., NEW YORK 20, N. Y.

CUT COSTS • INCREASE EFFICIENCY
STEP UP PRODUCTION

With Sheet Metal Parts of PROVEN QUALITY

Made and Delivered with DEPENDABLE SERVICE

Production profits from beginning to end are yours—*if* your preparatory machinery is geared for efficient, economical volume production. One of the South's oldest and most experienced sheet metal plants is prepared to help you do just that. Through the years this organization has earned a reputation for top quality products, painstaking workmanship and reliable service. You will find that this kind of special knowledge and experience applied to your maintenance problems will make an important contribution to continuous, profitable production.

Simply write.
wire or phone

GASTONIA TEXTILE SHEET METAL WORKS, INC.
GASTONIA, NORTH CAROLINA

A SHEET METAL WORKS SERVING TEXTILE MILLS

palatines for wool

palatine fast dyestuffs

... offer the lowest coloring costs for quality results.

... approach chrome color fastness (without the addition of chrome) by simple acid dyeing process.

... are fast to light, washing, perspiration, crocking, sea water and wear.

... are level dyeing on mixed wool and carbonized goods without neutralization—with excellent penetration. Most types are dischargeable with Rongalite.

... are particularly suitable for men's wear, dress goods, gabardines, tropical worsteds, cloakings, bathing suits, knitting yarns, carpet yarns and tops.

... on wool-nylon mixtures they produce good tone in tone dyeings of very good fastness to light and washing.

more production with less manpower

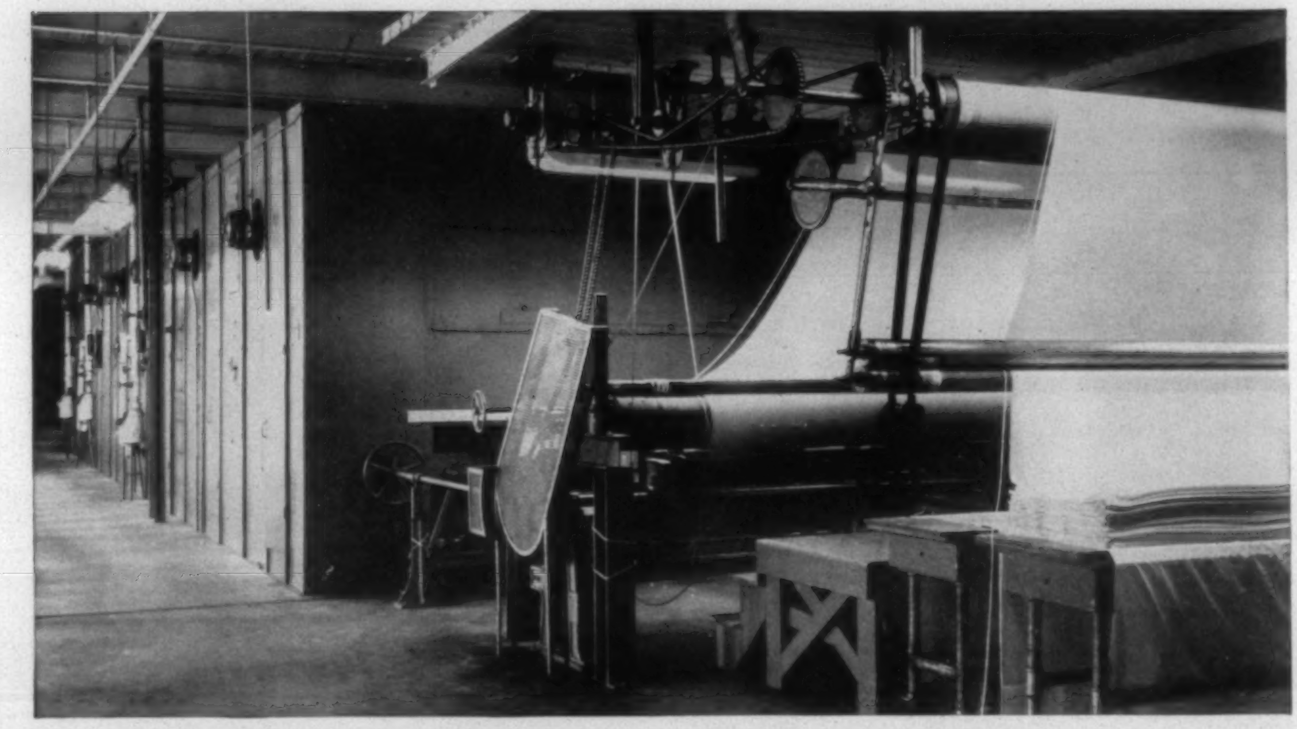
GDC

GENERAL DYESTUFF CORPORATION
435 HUDSON STREET • NEW YORK 14, NEW YORK
BOSTON • PROVIDENCE • PHILADELPHIA • CHICAGO • CHARLOTTE • SAN FRANCISCO

CONTROLLED, BALANCED AIR CIRCULATION

key to improved drying in

PROCTOR WIDE TENTER HOUSINGS...



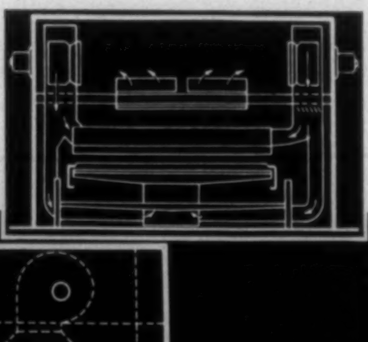
Users are reporting excellent results from several recently installed Proctor housings for use with wide tenters. It is significant to note that not only do these reports indicate high rates of production, but stress the uniform drying that is being obtained with this equipment.

One of the largest contributing factors to the success of these wide tenter housings is the air circulation system employed. High velocity air is impinged against both sides of the material through a completely enclosed high pressure air circulation system with air filtered on each cycle. This circulation is controlled as to total circulation and amount delivered to each pressure flue.

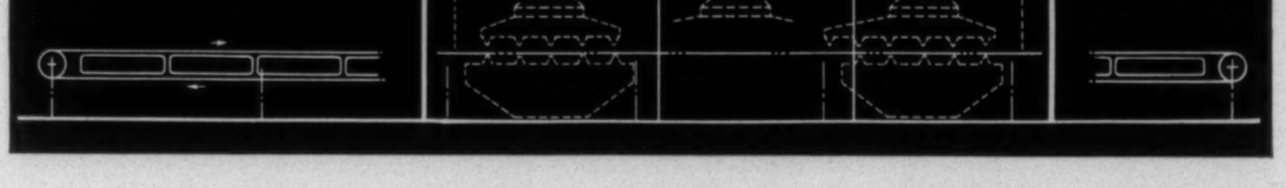
The result of this controlled, balanced air circulation system is maximum production of uniformly dried fabric that is delivered without distortion.

The improved drying that is being accomplished with these systems is typical of results that are being obtained with Proctor tenter housings, not only in handling wide goods—but also where the same basic principles are applied to the design of housings for use with narrower tenters. If your finishing process calls for tenter drying, investigate the possibilities of modern Proctor housings. Write for information today.

Much of Proctor drying equipment and textile machinery is covered in full or in part by patents or patents pending.



PROCTOR & SCHWARTZ, INC., 679 TABOR ROAD, PHILA. 20, PA.



They Do It With People
—why not with Paints?

The Say "Ah" Test

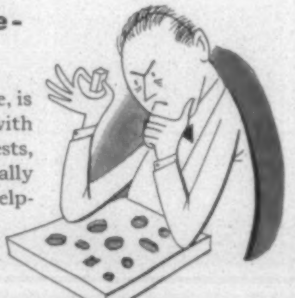
Some businessmen have found it wise to use a thorough physical check up to determine the health of prospective workers.

The Past-Performance Test

No one ever hires a person without applying the "Past-Performance" test. "What have you done?" . . . "What is your background . . . your education?" . . . "What are your qualifications?" . . . "Where have you worked before?" This, indeed, is good business.

The Square-Peg-in-the-Round-Hole Test

Newer, and of growing significance, is the aptitude test. Not content with past-performance and health tests, businessmen find that scientifically planned aptitude tests are most helpful in finding the *right* man for the *right* job.



The Round-Can-on-the-Square-Wall Test

How many square feet of solid coverage can you get from a round can of paint?

Let's not guess. It is better to test.

Paints, like people, differ greatly. A gallon of one paint will cover more square feet than a gallon of another. Some paints go on faster and easier. Some look better and last longer. So test, brother, test.

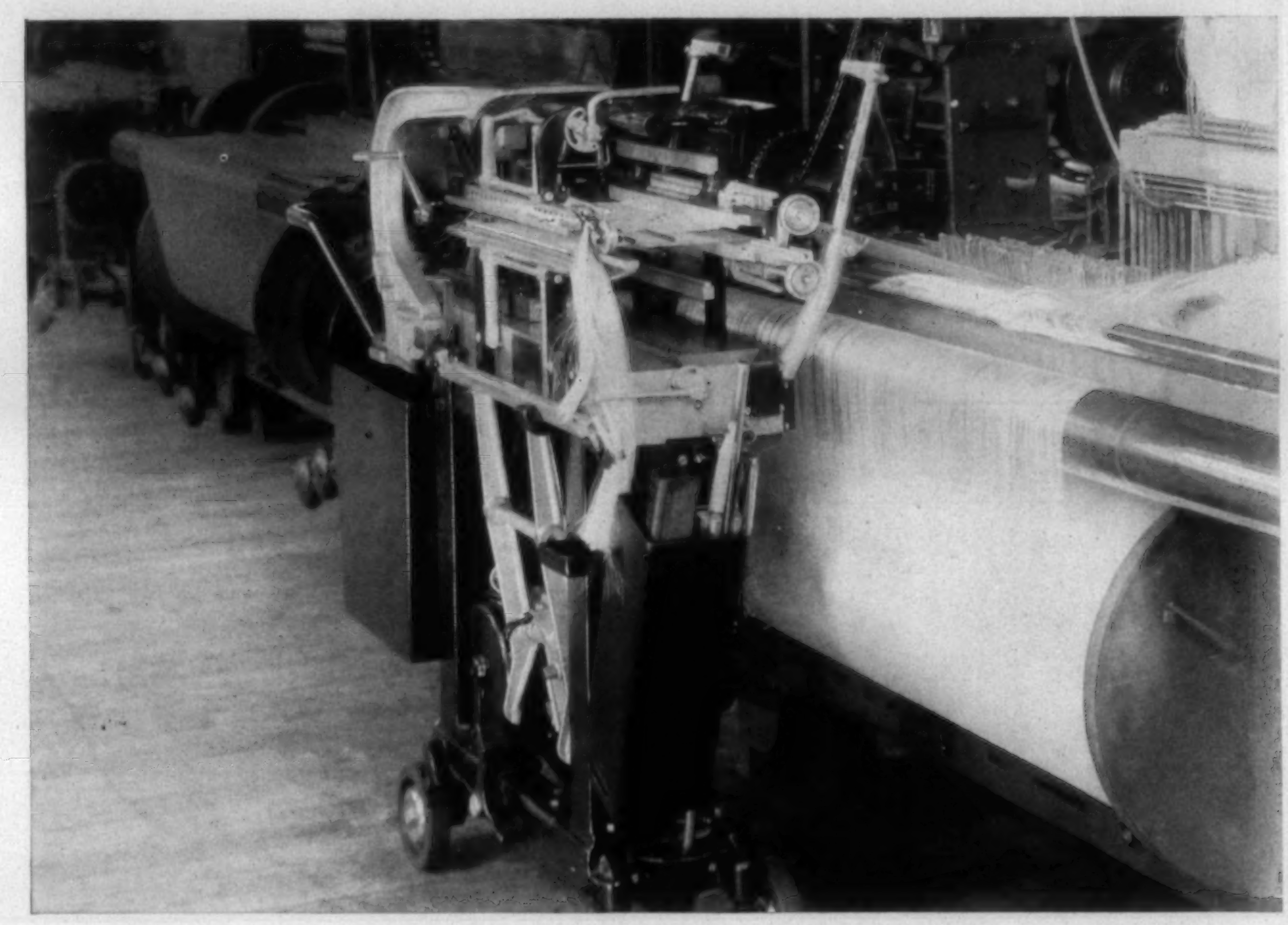
Take a gallon of Barreled Sunlight, thin properly, and put it on a wall. See how much it covers . . . how *well* it covers. Check how fast it goes on. Notice how white and clean it looks after drying. *Then*, do the same with a gallon of any other good paint. Compare the results . . . in terms of coverage, appearance and painting time. You'll see how true it is that Barreled Sunlight will give you a better-looking, longer-lasting interior paint job *for less money* than any other paint.

Let's talk it over. Write and our representative will call.

U. S. GUTTA PERCHA PAINT COMPANY
5-H Dudley St., Providence, R. I.

Barreled Sunlight
Paints

In whitest white or clean, clear, pleasing colors, there's a Barreled Sunlight Paint for every job



BARBER-COLMAN PORTABLE WARP TYING MACHINE SPEEDS REPLENISHMENT OF SYNTHETIC WARPS

BARBER COLMAN

The reduction of loom down-time is an important factor toward successful competition in the textile business. The less a loom is idle, the more goods it can produce; the greater the mill production, the more economical that production becomes. The Barber-Colman Portable Warp Tying Machine has proved its ability, in hundreds of mills, to reduce loom down-time required for replenishment of warp. One model of this machine (Model LS) is specially designed for synthetic yarns — and is also extremely efficient on wool, worsted, mohair, and other difficult yarns. The speed of the machine is illustrated in the example of mill data in the table at the right. The machine works directly back of the loom, as illustrated above, and is so compact that it can be operated in narrow loom alleys. Your Barber-Colman representative is qualified to discuss details of the possibilities for this machine in your mill — get in touch with him at the next opportunity.

DATA FROM A MILL

VISCOSE YARN

Number of ends on Beam — 5,714
160 sley by 68 picks
150/40/1-1/8 Viscose
6 Harness, 4 banks of Drop Wires

Average ends per hour tied — 5,761, on B-C Model LS Portable Warp Tying Machine. This includes preparation, tying-in, and pulling through.

AUTOMATIC SPOOLERS • SUPER-SPEED WARPERS • WARP TYING MACHINES • DRAWING-IN MACHINES

BARBER-COLMAN COMPANY
ROCKFORD • ILLINOIS • U. S. A.
FRAMINGHAM, MASS., U. S. A. GREENVILLE, S. C., U. S. A. MANCHESTER, ENGLAND

*POUR POINT

Today, it is essential to use the best lubricants money can buy — for maximum efficiency . . . lowest operating cost. That's why more and more production machinery is being lubricated with Tycol oils and greases.

Whatever your lubricating need — for turbine, steam engine, mine car or tipple, textile mill, stationary Diesel or locomotive — there's a Tycol high quality oil or grease exactly suited to your specific need.

In developing this comprehensive line, Tycol subjects each individual oil and grease to rigid tests during manufacture. This control assures the required lubrication characteristics — *POUR POINT, viscosity, color, penetration, to name a few — for maximum performance of that particular product.

Let us show you the extra value in every measure of Tycol oil and grease. Write your nearest Tide Water Associated office today.

TYCOL

INDUSTRIAL LUBRICANTS

Boston • Charlotte, N. C. • Pittsburgh • Philadelphia • Chicago Detroit • Tulsa • Cleveland San Francisco • Toronto, Canada

TIDE WATER ASSOCIATED OIL COMPANY

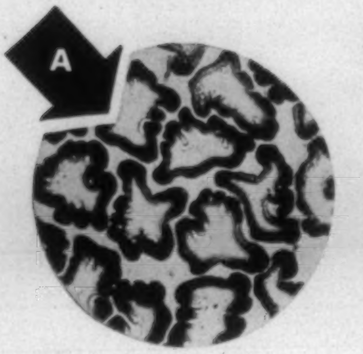
17 BATTERY PLACE · NEW YORK 4, N. Y.

***LEARN WHAT THIS PRODUCT CHARACTERISTIC MEANS TO YOU — READ "LUBRICANIA"**
This informative handbook, "Tide Water Associated Lubricania," gives clear, concise descriptions of the basic tests used to determine important properties of oils and greases. For your free copy, write to Tide Water Associated Oil Company, 17 Battery Place, New York 4, N. Y.

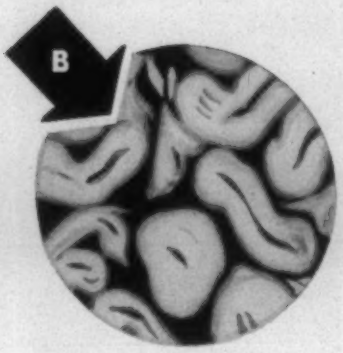
REFINERS AND MARKETERS OF VEEDOL — THE WORLD'S MOST FAMOUS MOTOR OIL

How many of these Fibers can you Identify?

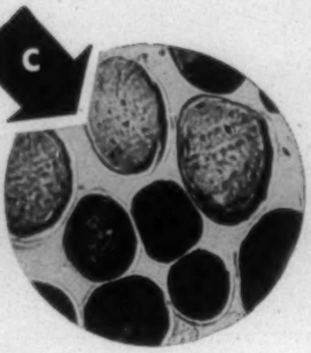
A



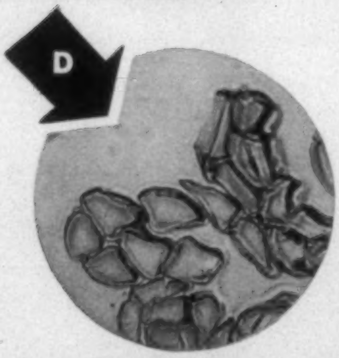
B



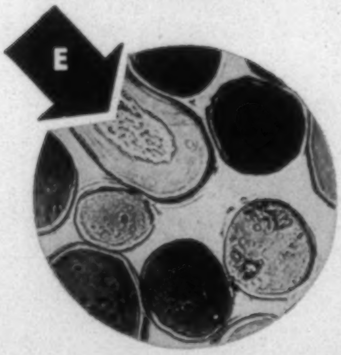
C



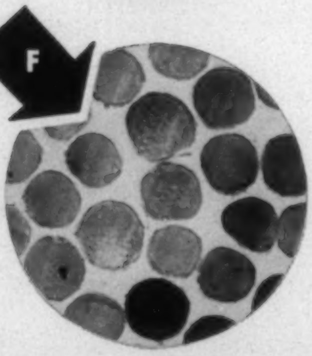
D



E



F



"PHOTOMICROGRAPH COURTESY
TEXTILE FIBER ATLAS"

You're an expert if you guessed all six. No matter how many of these fibers you named correctly, they're all vital to Stein Hall. Each of these fibers and many more are continually under the scrutiny of our laboratory technicians.

For 82 years, Stein Hall has serviced the textile industry by developing the finest products for warp sizing, printing, and finishing fabrics made from these and other fibers.

Continuous study... endless testing under expert supervision in controlled laboratories means a more efficient operation in your plant.

Trained salesmen will tell you about Stein Hall textile products. Laboratory specialists will back them up. For a textile problem, call on Stein Hall.

A Viscose Rayon
B Cotton
C Wool
D Silk
E Mohair
F Nylon

WRITE FOR QUOTATIONS, FREE SAMPLES AND CONSULTATION

STEIN SH HALL

285 MADISON AVE., NEW YORK 17, N. Y.
Branch offices in 16 other cities in the U. S. and Canada

Less Slippage, More Poundage, Uniform R.P.M. With This 180° Belt Contact

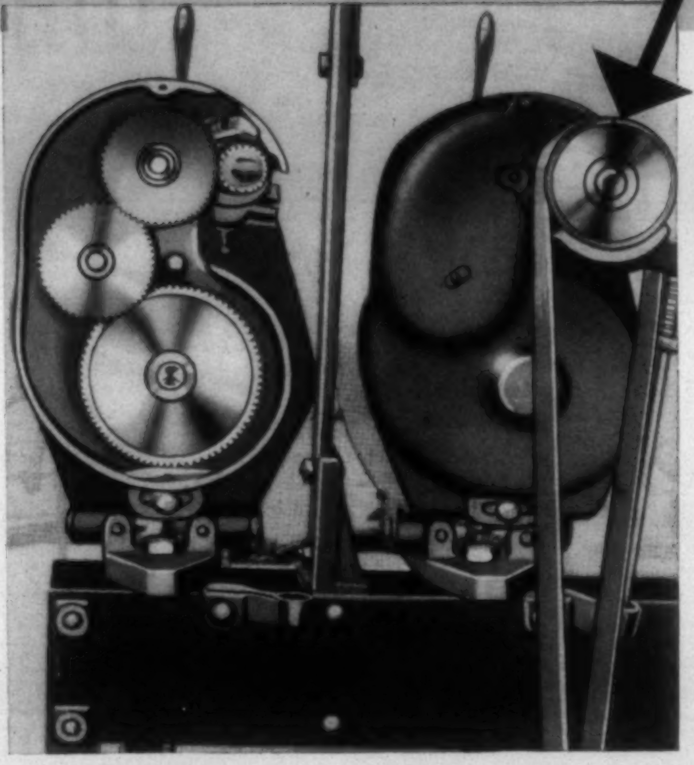


Illustration also shows positive gear driven gainer attachment which controls the ratio between the revolutions of the spindle and the cam.

FACTS ABOUT FOSTER MODEL 75

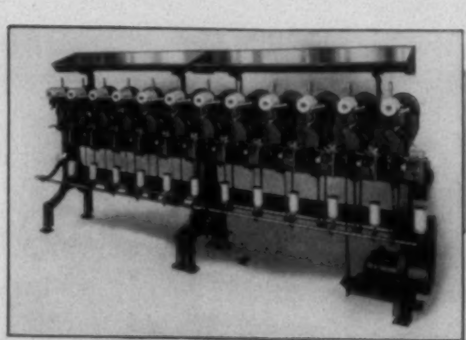
1. **HIGHEST PRODUCTION,** consistent with good quality. Spindle speeds up to 1500 r.p.m.
2. **LOW OPERATING COST.** Machine quickly loaded, threaded and doffed. Lifting of convenient handle starts spindle. Durable, positive automatic stop motion.
3. **LOW MAINTENANCE & REPAIRS.** Floor stands, frames, rails and supply board are made of steel. Spindles are ball bearing mounted. Belts are under tension only when spindles are running. Large diameter, wide angle cam reduces shock and vibration. Tension and pressure adjustments easily made.
4. **HIGH QUALITY OUTPUT.** Slow starting device prevents stretching and breaking at start. Practically straight thread line (even with oiling attachment) prevents excessive tension build-up. Straight edge cone has slightly convex base to prevent "nipping" when knitting or warping. Foster Zenith Yarn Cleaner provides accurate inspection. Tension automatically compensated for changing yarn speed. Oiling attachment designed to provide uniform application of oil.

Bulletin A-92-A on request

Each spindle on the Foster Model 75 (for winding rayon, nylon, silk and other yarns) is driven by its own belt from a countershaft running the length of the machine. There is a quarter turn in each belt and a full 180° arc of contact is obtained. Result — less slippage which means increased production and uniform r.p.m. of all spindles.

This is only one of many reasons why the Foster Model 75 produces an ideal cone (straight edge or pineapple) at minimum cost for knitting or warping. Other contributing factors are listed herewith.

FOSTER MACHINE CO., WESTFIELD, MASS., U. S. A.
Southern Office: Johnston Bldg., Charlotte, N. C. Canadian Representative: Ross Whitehead and Company Limited, University Tower Bldg., 660 Ste. Catherine St. West, Montreal, Que.; European Representative: Muschamp Taylor Limited, Manchester, England.



FOSTER MODEL 75

FOR WINDING RAYON, NYLON AND OTHER YARNS

WATCHING WASHINGTON

[Exclusive and Timely News from the Nation's Capital]

Truman is learning fast, in the latter stage, that this Congress is not rubber-stamping "mandates," or bowing to commands of union leaders. Times have changed fast since January when little men, after White House communion, issued orders like atoms cracking. Under growing strength of a coalition, Truman and his twin New and Fair Dealers, radicals and fellow travelers, are being pushed back to where they'll get much less than half a loaf on demands and "mandates."

Coalitionists are in control, calling the pitch and writing the score. There are confusing cross currents on minor issues, but not major objectives. On labor law repeal Truman is taking what Congress wants or nothing.

Impression grows in some quarters of Congress that Truman forces do not really want workable legislation on some campaign promises. Some bills offered are fantastic, which Congress cannot accept. But they allow Truman to say Congress refused to carry out "mandates."

Administration forces hurriedly abandoned the demand for blanket authority to Truman to determine who gets aid under new foreign lend-lease when it faced certain defeat. They retreated to the demand for the full $1,450 million for arms abroad, as asked by Truman, without unlimited power of distribution.

Spending the $1,450 million for rearming abroad will serve to release funds of beneficiaries to pay deficits on their nationalized industries, say some Senate opponents. Some countries rushing to join the Atlantic Pact refused to increase their budgets a dime for rearming, but call loudly now for arms gifts.

Large cash handouts to backward areas of the world are the last thing they need, and are sheer waste, Congress is being told by experts discussing Truman's vast world spending program. They need first health, roads, trained men and then development free from political pressures.

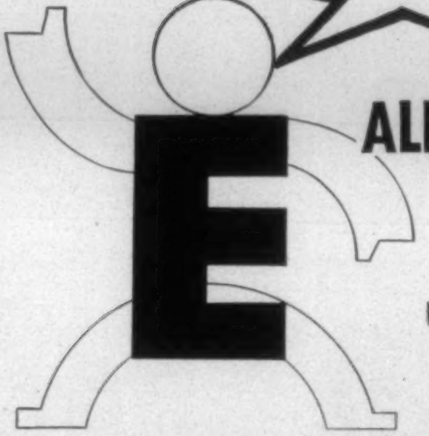
Some South American countries are being told to "clean house" before they can get more loans here. State department says this, and adds the approaching hemispheric economic conference may well be abandoned if it is to deal only with resolutions demanding bigger and fatter loans by the U. S. to member nations.

Truman has signed the bill ending compulsory overtime-on-overtime pay under the Walsh-Healy Act. An employer may pay premium

EMMONS • EMMONS • EMMONS • EMMONS • EMMONS • EMMONS • EMMONS • EMMONS

EMMONS • EMMONS • EMMONS • EMMONS • EMMONS • EMMONS • EMMONS • EMMONS

"New *EMMONS* **ALUMINUM** Heddle Frame Proves Itself!"



ALREADY OVER 100 MILLS AGREE

That *EMMONS* Revolutionary Aluminum Heddle Frames

✓ Have A New Rigidity That Greatly Reduces Distortion.

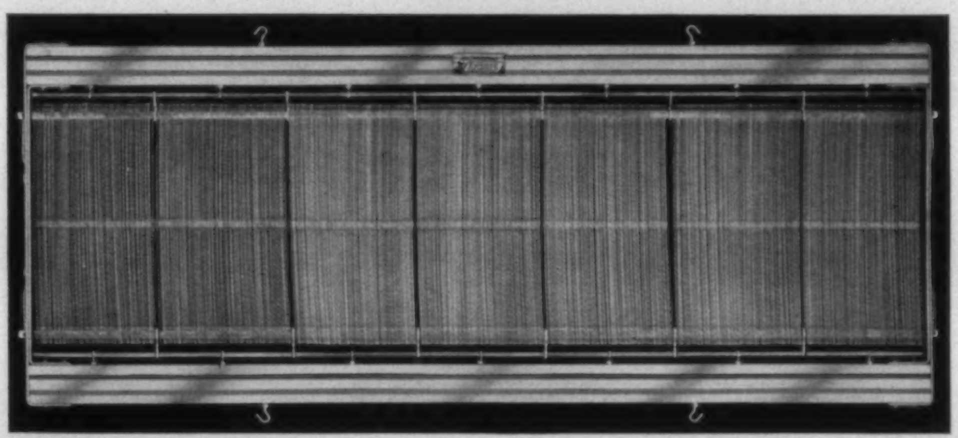
✓ Give Extra Efficiency On High Speed Looms.

✓ Stop Heddle Sticking (Heddles Slide Freely).

✓ Greatly Reduce Heddle and Yarn Breakage.

✓ Permit Increased Loom Speed.

The new Emmons Aluminum Heddle Frame is equipped with outside hooks and eyes that are adjustable laterally to any position and vertically to some extent. The frame comes with limited slide hooks of any type desired.



"Here Are Two Other Good Reasons Why Aluminum Frames Are Better Frames!"

✓ Aluminum Frames Won't Corrode Regardless of Weave Room Humidity.

✓ Aluminum Frames Are Many Times Stronger Than Wood and Last Longer.

For complete details write direct or see your nearest E Man.

"E" MEN ARE LOCATED AT:

CHARLOTTE
Branch Plant
GEORGE FIELD, Manager
P O. Box 2036,
Phone — 3-7503

GREENVILLE
P W COLEMAN
P O Box 1393,
Phone — 2-3327

NEW YORK
W S. TAYLOR
52 Vanderbilt Avenue
Phone — Lexington 2-6060

ATLANTA
ARTHUR HARRIS
P. O. Box 1982,
Phone — Main 2643

CHICAGO
ALBERT R. BREEN
80 E. Jackson Boulevard
Phone — Harrison 7140

DALLAS
R. D. HUGHES SALES CO.
2201 Cedar Springs
Phone — C-6283; C-6284

EMMONS

EMMONS LOOM HARNESS CO., LAWRENCE, MASS.

rates for work outside regular hours without adding it to straight time rates. The law nullifies the Supreme Court's decision in the Bay Ridge stevedoring case, and is retroactive.

Investigation of wholesale frauds in jobless benefits to workers still employed is being discussed by the House Ways and Means Committee. Frauds are reported at a high level in Northern and Eastern industrial areas. Over $115,000 was paid in one instanc to 900 workers who redistributed themselves among five employers.

Adjournment before Oct. 1, or later, is problematical because Truman pushes his foreign aid and big spending proposals as he refuses to compromise on campaign promises. In both branches there's threat of a sit-down strike. Net results of it may be a blanket budget-balancing rider, applicable to all appropriations, that will hold spending within income.

Federal aid to education is dead in this session, and may not be brought up in the next. It went down under the onslaught of religious controversy over the Barden Bill, which denied Federal funds to non-public schools. Last-minute efforts at compromise failed.

Internal warfare in the armed services over merger is growing in intensity. Differences center largely on functions, and claims to manpower. Defense Secretary Johnson cracks down wrathfully, but is not making headway toward peace.

N. L. R. B. will continue to slap down attempts of unions to evade the non-Communist affidavit provision by shifting job titles. C. I. O.'s tobacco workers have been ordered to "clear up" the status of Don Henderson, recently shifted from president to "administrative director."

C. I. O.'s loud talking, table thumping Communist-controlled unions, are carefully holding back from showdowns on wage demands. Gneral Electric and Westinghouse turned down fourth round demands because of business conditions, and there were no fireworks.

Officials of Communist-controlled unions in C. I. O. are facing ouster demands by Philip Murray as they come up for re-election. He says they give too much attention to the party line and not enough to straight union business. Some of them are trying to make better fourth round settlements than Murray can make for steel workers, to weaken the crackdown on them.

Secretary Tobin is being charged with using a "back door" mechanism of the Walsh-Healy Act to raise minimum wages. He's raised them in some areas as high as $1.23 an hour. Under the law he can fix minimums on government contract work, which usually becomes the minimum for all work in a locality.

Truman is exerting pressure on the Senate to call up the House-passed anti-poll tax bill. He wants action on at least one civil rights proposal. If called up it's likely to meet a prolonged filibuster, even with recess just ahead.

For better lubrication of plain bearings and gears in spoolers and warpers

Gulf Lubrication Engineers recommend

GULF HARMONY OIL

Gulf Harmony Oil has wide application in textile spinning departments — for warpers, spoolers, and other vital equipment. It is ideal for oil lubricated plain bearings, and is equally effective for lubrication of spur and bevel gears.

Gulf Harmony Oil is an exceptionally stable lubricant—helps insure freedom from sludge deposits in bearing reservoirs or gear cases. It has outstanding lubricating qualities and is available in the proper range of viscosities to cover general spinning room requirements.

Gulf Harmony Oil is recommended for use in plain bearings, chains, knotter mechanisms, and gears of automatic spoolers and for the bearings, chains, cams, and gears of warping machines. The use of this quality oil plus correct lubrication practice, as recommended by the Gulf Lubrication Engineer, can help you reduce wear in warpers, spoolers, and other auxiliary equipment in the spinning department.

Gulf Harmony Oil — and the complete Gulf line of more than 400 quality lubricants — are available to you through 1200 warehouses located in 30 states from Maine to New Mexico. Write, wire, or phone your nearest Gulf office today.

GULF INDUSTRIAL LUBRICATION

Gulf Oil Corporation · Gulf Refining Company

Division Sales Offices:
Boston · New York · Philadelphia · Pittsburgh · Atlanta
New Orleans · Houston · Louisville · Toledo

A Customer Speaks For H & B TEXTILE MACHINERY

"Those 24 new slubbers you built for our mills are certainly grand machines. We could not ask for better. They are turning out a beautiful product, and about all the attention they need is creeling, doffing, and cleaning. Ends down on them are nearly as scarce as hens' teeth. Everybody who has anything to do with them is delighted that we have them.

"The three new opening rooms you furnished and the nine single-process pickers you installed are likewise most satisfactory and doing excellent work. The picker laps are clean, firm, and very even and contain virtually no neps. It is all very excellent machinery.

"Rest assured that when we are again in the market for new machinery, we shall be only too glad to figure with you on it."

The quotation herewith is from a letter recently received from a well known New York firm, operating a group of southern mills. This company's experience indicates what YOU may expect if you modernize with H & B textile machinery.

TYPICAL INSTALLATION OF H & B HIGH-DRAFT SLUBBERS

H & B AMERICAN MACHINE CO.

Builders of Modern Textile Machinery

FACTORY, EXECUTIVE OFFICES AND EXPORT DEPARTMENT • PAWTUCKET, R. I., U. S. A.

BRANCH OFFICES:—Atlanta, Ga. - 815 Citizens & Southern National Bank Bldg.; Charlotte, N. C. - 1201 Johnston Bldg.

Rayon Reports

ed Monthly by American Viscose Corporation, New York, N.Y.

August, 1949

Rayon-and-Wool Men's Suits Coming this Fall for Year-'Round Wear

This fall, for the first time, men's stores will offer rayon-and-wool suits for year-'round wear. Several large mills are now making such suitings, in medium weights, in blends ranging from sixty to eighty per cent rayon.

These rayon-and-wool suitings, now being made up, are thirteen-and-a-half to fifteen ounce worsted-type fabrics, most of which are made on the cotton system. However, a variety of constructions on the woolen and worsted systems have been worked up both by the trade and by Avisco's Fabric Development Department.

Rayons accounted for 17 per cent of the total men's summer suit volume last year and it is indicated that this percentage will swell to 23 to 28 per cent this year and 35 to 40 per cent next year. Rayon blends also are giving every indication of increasing the total volume of men's suit sales, just as rayon long ago multiplied the number of dresses the average woman buys. More recently rayon and rayon blends have broadened the sportswear markets generally, including both shirts and slacks. Similarly rayon blends have stimulated business in topcoats and raincoats.

Rayon suits them all the year 'round!
AMERICAN VISCOSE CORPORATION
AMERICA'S LARGEST PRODUCER OF RAYON

One of the current ads building consumer acceptance for rayon in year 'round men's suitings.

The high price of fine apparel wools, of course, is focusing interest in blends of wool with rayon. This is especially true since the use of crimped rayon staple, because of its superior carrying power, increases the spin limits of the coarser, and less expensive, wools. Furthermore, rayon-and-wool blends are easier to process than most grades of wool.

Of prime importance are the many new styling possibilities in the use of rayon. Rayon summer suits have enjoyed a good season due to the unbeatable combination of appearance, performance and price.

MAKE USE OF *Avisco®* **4-PLY SERVICE**

To encourage continued improvement in rayon fabrics, American Viscose Corporation conducts research and offers technical service in these fields:

1. **FIBER RESEARCH**
2. **FABRIC DESIGN**
3. **FABRIC PRODUCTION**
4. **FABRIC FINISHING**

AMERICAN VISCOSE CORPORATION

America's largest producer of rayon

Sales Offices: 350 Fifth Avenue, New York 1, N. Y.; Charlotte, N. C.; Cleveland, Ohio; Philadelphia, Pa.; Providence, R. I.

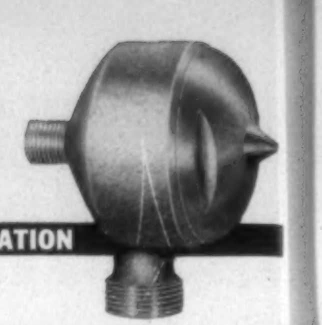
RAYON 20 YEARS AGO

Paris, August, 1929—The new rayon fabrics for the winter season are now on display. Early Victorian, Spanish and Mexican designs are prominently featured.

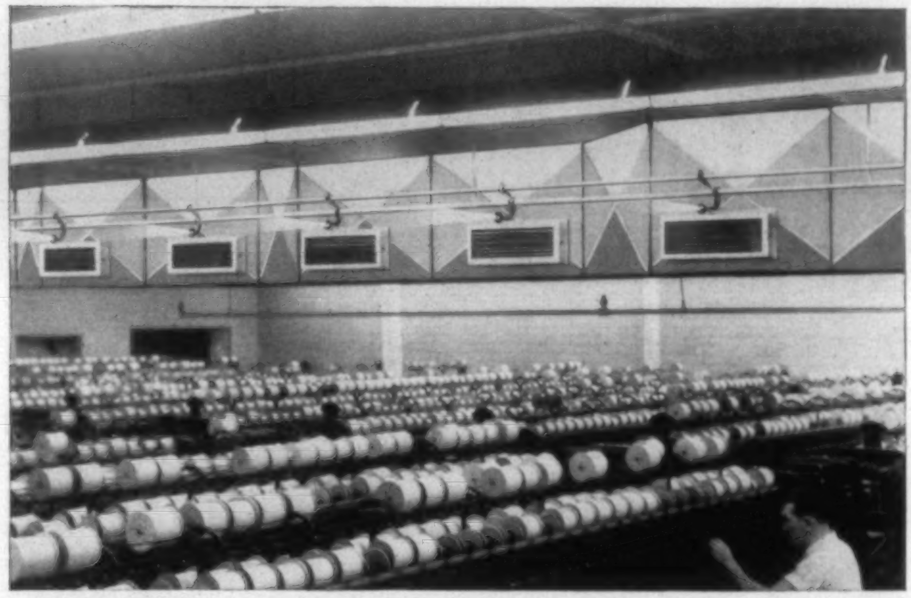
London, August, 1929—Printed rayon velvets are popular in fashion circles, here. Small, compact designs are most favored.

New York, August, 1929—Knitters are using rayon in increasingly large quantities in the manufacture of neckties. Recent improvements in rayon yarn quality are responsible for this increased interest.

Bahnson ECONOMIZERS



FOR HUMIDIFICATION SYSTEMS OR SUPPLEMENTARY EVAPORATION



BAHNSON ECONOMIZER ATOMIZERS USED FOR SUPPLEMENTARY EVAPORATION IN A BAHNSON CENTRAL STATION AIR CONDITIONING SYSTEM WITH REFRIGERATION

The development of the Bahnson Type ESC Economizer Atomizer was based on three established principles required for use in industrial applications.

1. Fine spray quality
2. High evaporative capacity
3. Minimum air consumption

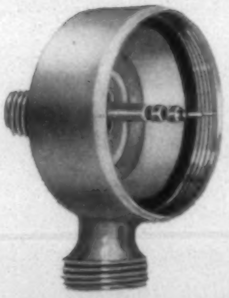
The result is this highly efficient and simply constructed atomizer that gives maximum evaporative capacity—requires minimum air consumption—provides important savings in compressor costs and operating costs. The design and construction of this unit eliminates objections found in earlier type water pressure atomizers.

BAHNSON ECONOMIZERS OFFER—

FLEXIBILITY . Various evaporative capacities and spray qualities are obtained by merely changing air and water pressures at supply points.

ECONOMY. . . Atomization is obtained through mixing compressed air with water supplied under pressure, thereby reducing compressed air requirements.

DEPENDABILITY Self-cleaning feature is included. A stainless steel cleaning pin operates in conjunction with water pressure to remove dirt from water orifice.



HOUSING AND CLEANING PIN

WATER DIAPHRAM AND VALVE STEM

SPACER RING

AIR DIAPHRAM AND ORIFICE

FRONT CAP AND WATER VALVE SPRING

S. C. STIMSON
A-3 VIRGINIAN APTS.
GREENVILLE, S. C.
I. L. BROWN
886 DREWRY STREET, N. E.
ATLANTA, GEORGIA
R. M. ANDERSON
219 WOOD STREET
CROWN POINT, INDIANA

Bahnson POSITIVE CIRCULATION LOWER OPERATING COST *System*
AIR CONDITIONING ENGINEERS

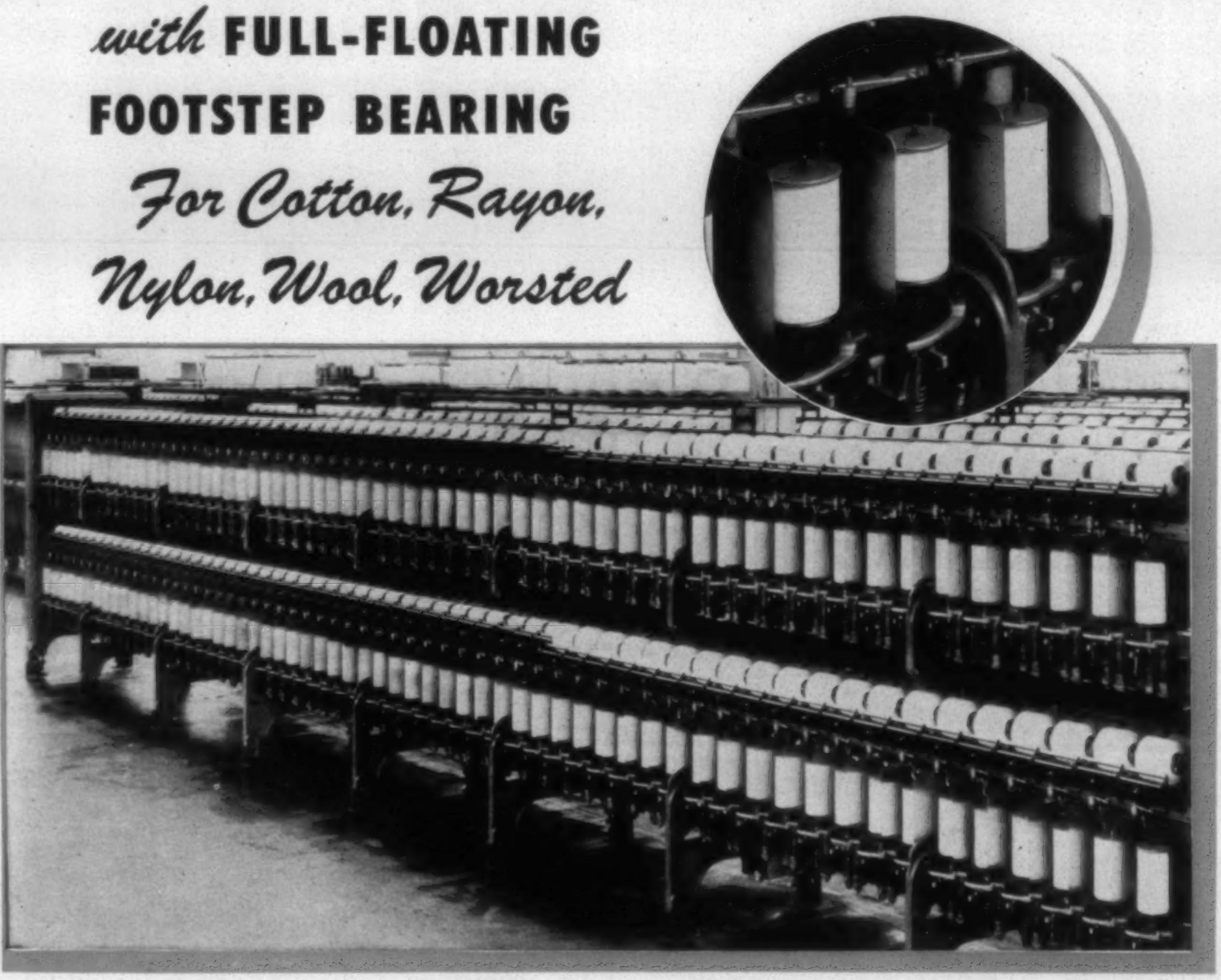
THE BAHNSON COMPANY
WINSTON-SALEM, N. C.

F. S. FRAMBACH
703 EMBREE CRESCENT
WESTFIELD, NEW JERSEY
R. T. HODGDON
1 CLARINA STREET
WAKEFIELD, MASS.
DEWITT CLARK
553 S. FIGUEROA STREET
LOS ANGELES 13, CAL.

Marquette ROLLER BEARING SPINDLES

with FULL-FLOATING FOOTSTEP BEARING

For Cotton, Rayon, Nylon, Wool, Worsted



34,000 Marquette Roller Bearing Spindles in this nylon throwing mill replaced 41,500 plain bearing spindles—with no increase in power consumption. Package size was increased from 4 oz. to 12 oz., and speed was increased from 12,000 to 14,000 r.p.m. Result: *More yarn at lower cost.*

Modernize *your* old frames with Marquette Roller Bearing Spindles, or specify them on new frames. They operate efficiently at high speeds with large packages, and require less power. For a test installation, contact our home office or one of our representatives.

PROTECTED BY U. S. AND FOREIGN PATENTS, AND PATENTS PENDING

The Marquette METAL PRODUCTS COMPANY
CLEVELAND 10, OHIO
SUBSIDIARY OF CURTISS-WRIGHT CORPORATION

Representatives:
BYRD MILLER, WOODSIDE BLDG., GREENVILLE, S. C.
C. H. WHITE, 1229 PAMLICO DRIVE, GREENSBORO, N. C.
WILLIAM P. RUSSELL, BOX 778, ATLANTA, GEORGIA
JOHN J. HALLISSY, 58 LIVINGSTON AVE., LOWELL, MASS.
IAN M. HALDANE & COMPANY, P. O. BOX 54, LONDON, ONT.

Also Manufacturers of: HYDRAULIC GOVERNORS • FUEL OIL PUMPS • FUEL OIL INJECTORS WINDSHIELD WIPERS FOR AIRCRAFT, TRUCKS AND BUSSES • PRECISION PARTS AND ASSEMBLIES

WENTWORTH

Double Duty Travelers

Reg. U. S. Pat. Off.

HICKS — AMERICAN — WILSON — U. S. STANDARD

Last Longer, Make Stronger Yarn, Run Clear, preserve the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE

NATIONAL — ETARTNEP FINISH
A NEW CHEMICAL TREATMENT

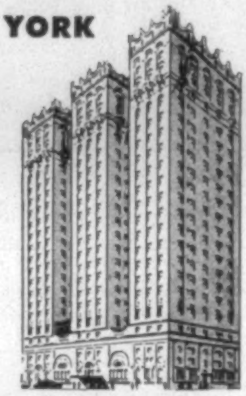
Manufactured only by the

NATIONAL RING TRAVELER CO.
PAWTUCKET, R. I.
131 W. First St., Charlotte, N. C.
H. B. ASKEW, So. Agent

Now... many rooms air-conditioned

THE Vanderbilt
PARK AVENUE AT 34th ST.
NEW YORK

Count on the Vanderbilt for modern comfort and old-fashioned friendliness! 600 fine rooms with bath and radio... from $4 single, $7 for 2 persons, suites from $12.



A MANGER HOTEL

5 Minutes from Grand Central & Pennsylvania Station.

Thomas J. Kelley, Gen. Mgr.

HOME OF THE NEW
Purple Tree
and famous restaurants

IN THE NUMBER 10
... OR NUMBER 5

VOGEL PATENTED has an outfit to suit your needs

VOGEL NUMBER 10
SEAT-ACTION CLOSET

Vogel Number 10
Seat-Action Closet

For schools, factories, institutions, comfort stations, public and semi-public places. Will withstand hard continuous use—free from complicated mechanism. A thorough, powerful flush is obtained with about 4 gallons of water. This closet has syphon-action vitreous china bowl.

VOGEL NUMBER 5
FACTORY CLOSET

The Vogel No. 5 fills the demand for a durable seat-action closet for factory use. It has enameled flushing rim hopper, enameled inside—painted red outside—galvanized pressure tank and heavy brass flush valve. Very economical in the use of water.

Vogel Number 5
Factory Closet

VOGEL PATENTED PRODUCTS

Joseph A. Vogel Company
Wilmington 99 • Delaware

We Recommend

the use of

CATYLON

Cation-Active Softener

- **For that velvety, smooth softness**
- **For that permanent, uniform finish**
- **For that richer, fuller hand**
- **For those bright shades & print colors**

THE HART PRODUCTS CORPORATION, 1440 BROADWAY, NEW YORK 18, N.Y.

Hartex Products:

Rayon Oils & Sizes
Nylon Oils & Sizes
Kier Bleaching Oils
Finishing Oils
Synthetic Detergents
Conditioning Agents
Scrooping Agents
Splashproof Compounds
Delustrants
Leveling Agents
Cationic Softeners
Cotton Warp Dressings
Wetting-Out Agents
Weighting Agents
Mercerizing Penetrants

Hart Products

based on research

KENTEX

Precision-Built APRONS

Cut to the exact thickness you specify; precision built and micrometer gauged to eliminate dimention variations; made of finest quality bark-tanned or chrome leather—KENTEX APRONS really do *fit better—wear longer* . . . and scores of mills (in which Kentex Aprons have been standard equipment for years), have found they can be depended upon to help produce more *uniform* yarn, and *more* yarn per machine.

Write us today for free samples and prices of Kentex Aprons.

TEXTILE APRON COMPANY
EAST POINT, GEORGIA
J. B. KENNINGTON, OWNER

For *Economical* Maintenance

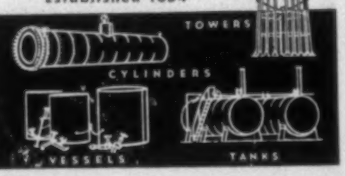
COLE
ELEVATED TANKS

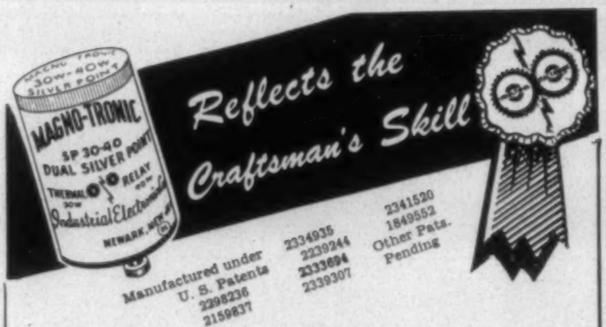
• Design plays an important part in tank maintenance. Experienced engineers design Cole tanks for easy access and minimum maintenance costs, as well as for permanence, safety, and dependability. Send us your inquiries for tanks 5,000 to 2,000,000 gallons—stating capacity, height to bottom, and location.

Write for the latest Cole catalog—"TANK TALK"

R. D. COLE
MANUFACTURING CO.
NEWNAN, GA.

Established 1854





Manufactured under U. S. Patents 2298236 2159837 2334935 2239244 2333694 2339307 2341520 1849552 Other Pats. Pending

THE MAGNO-TRONIC FLUORESCENT STARTER

PROTECTS Fully automatic thermal relay with unusually long life that eliminates blinking lights and protects all auxiliary equipment.

SIMPLIFIES Replacement of worn-out lamp automatically restores closed circuit—replacement of starter unnecessary. No button to push.

REDUCES COSTS Magno-Tronic starters provide exact timing in the lamp electrode—preheating process preventing excessive loss of emission material thereby assuring the maximum in the useful life of a lamp. The established quality of this starter saves considerable time in maintenance and man hours required to repair and/or replace an inoperative lighting unit.

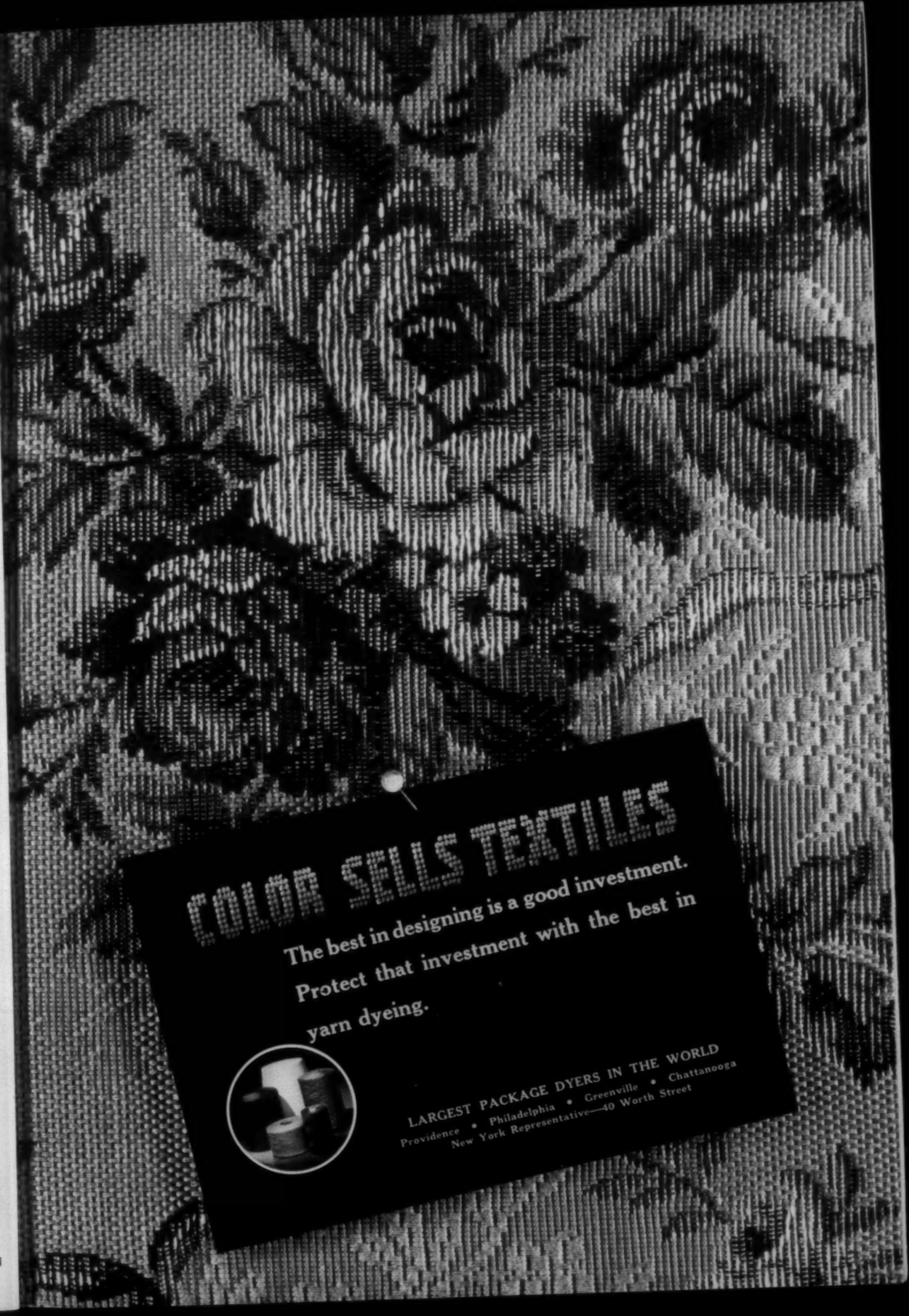
VERSATILE Will operate efficiently over an extended voltage range under widely varying temperatures.

The (SP-15-20) for use with either 15 or 20 watt lamps
The (SP-30-40) for use with either 30 or 40 watt lamps
The (SP-100) for use with 100 watt lamps

GUARANTEED FOR ONE YEAR.

Ask for descriptive literature

INDUSTRIAL ELECTRONICS CORP.
MAIN PLANT Newark 2, N. J.



The best in designing is a good investment. Protect that investment with the best in yarn dyeing.

LARGEST PACKAGE DYERS IN THE WORLD
Providence • Philadelphia • Greenville • Chattanooga
New York Representative—40 Worth Street

Another Exclusive
Southern Eye

Something Entirely New—A Full Tension, First Pick, Streamlined Shuttle Eye that has everything.

The Southern 1200 *Series*

The travel of the filling is Directed, —not left to Chance.

The filling is "pulled in" the Anti-Ballooning Scroll. Guided into the Tension Pads—Slips under the Bill—The yarn becomes trapped,—cannot flip out as it is under *full* tension. This all takes place within a few inches of shuttle travel.

On Second Pick

the filling slides with great velocity along the wing leg and is instantly caught in leg trap from where it is compelled to run smoothly and under even tension until next bobbin change.

Completely universal for every kind of yarn.

The Yarn being always "Directed," assures the above functions repeating themselves unerringly,—unfailingly.

Avail yourself of the full knowledge of this new era in Shuttle Eyes. Interesting data will be gladly sent without obligation.

Southern Shuttles Division

(Shuttle Headquarters)

of **Steel Heddle Mfg. Co.**
621 East McBee Avenue, Greenville, South Carolina

A new, modern Shuttle Plant at Paris, S. C., is now open to better serve your needs.

WHAT OTHERS ARE SAYING

Conditions Are Better

TEXTILE conditions as a whole have changed for the better since the first of July. While we cannot be too optimistic at this time, we do feel as if the worst is over.

We think general business conditions are somewhat better since there has been an orderly recession in prices for the non-durable industries. These non-durable goods or consumer goods, have leveled off whereby inventories are low at the wholesale level and at the retail level there isn't much goods to cause any great alarm. Naturally, with inventories down the next step could be a sustained buying program which would result in orders placed with the wholesalers and manufacturers. This should make better operation and an improvement in prices to those industries who suffered the most through drastic price declines. There are still approximately 60,000,000 people employed and while the unemployed has risen to new heights since the period before the war, the unemployment problem is not too serious when you consider the school and college ages who have joined the ranks of job seekers.

Many plants which had curtailed have started back on full operation schedules and others are adding to their labor supply those who were forced to be laid off. The cotton industry adopted shorter hours and curtailing instead of stocking goods. This, to our way of thinking, is the first time the entire cotton textile industry has used any great degree of judgment in controlling a situation which started out to be very serious. Curtailing working hours and cutting the take-home weekly pay of workers is very bad, but if the entire industry can get on better footing and assure longer operation schedules in the future, without cutting wages, it would be to every worker's advantage to have the industry adopt this procedure.

Inasmuch as cotton textiles, which are classed as consumer or non-durable goods, have had their orderly recession, prices should stabilize or improve unless the recession of durable goods and heavy goods should decrease to such an extent causing general business alarm and fear. So far, durable goods and all heavy equipment prices have held up, but they must seek a lower level in order to balance the economy in this country. We hope that when these prices start down they will not drag non-durable goods down with them, but that the orderly recession will be accomplished with minimum hazard to all — *Opp-Micolas News,* Opp and Micolas Cotton Mills, Inc., Opp, Ala.

'Bring Your Own'

> **HELP WANTED!**
>
> Experienced quilling machine operator. Good pay, good working conditions, plenty of work. Be sure to bring your own quilling frame when applying for this job.
>
> **A.B.C. YARN MILLS**

HOW would you like to apply for this job? Suppose that every cotton mill job required the workers to furnish their own openers, pickers, cards, combers, spinning and winding equipment, mercerizing and dyeing machinery and quilling frames. What would it cost?

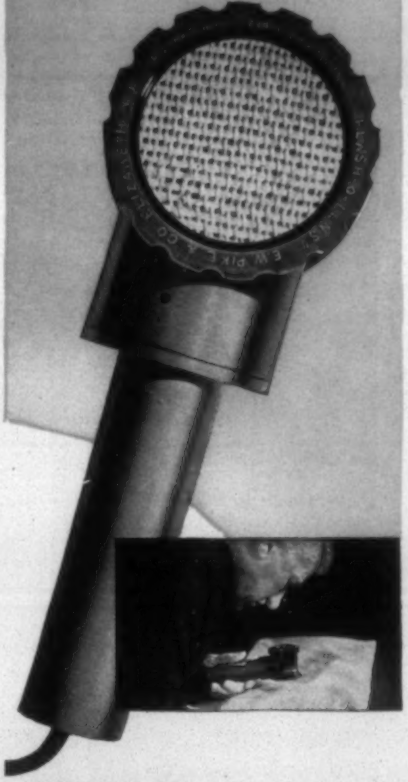
A recent impartial survey by the Ralph E. Loper Co. reveals that it costs an average of $16,150 to create *one* job in the cotton textile industry.

This figure compares with a similar analysis made by the firm in 1936 when it was estimated that a capital investment of $4,402 was needed to create a cotton textile job.

A breakdown of this $16,150 shows that $4,800 is needed for buildings, compared with $1,074 in 1936; for machinery $8,600 compared with $2,146 in 1936; $2,750 working capital versus $1,182 in 1936. In other words it requires 267 per cent more money or "invested capital" to create *one* cotton textile job now than it did in 1936.

The American capitalistic system makes it possible for others to invest their money in setting you up in business. *You are on the unbeatable team of investor, management and worker.* These three working together have provided Americans with the world's highest living standard. Let's continue to work hard on this team of fundamental Americanism, the free-enterprise system. — *Dixie News,* Dixie Mercerizing Co., Chattanooga, Tenn.

ACCURATE
Textile Inspection
with
FLASH-O-LENS
THE ILLUMINATED MAGNIFIER SPOTLIGHTS AS IT MAGNIFIES



EXCELLENT FOR

- counting picks
- laying out textile patterns
- matching colors
- testing stitch length and width on knitted fabrics
- all types of textile inspection

Portable Battery and Electric Models Available with 5, 7, 20, or 40 Power Lenses.

Detachable Textile Counting Plate for use with 5 power models quickly gives 1", ½", ¼", and ⅛" measurements.

5 Power Battery Model with textile plate	5 Power Electric Model with textile plate
$11.65	$13.65

Send for our illustrated catalog. Use coupon below.

E. W. PIKE & CO. ELIZABETH 3 NEW JERSEY

E. W. PIKE & CO.
Elizabeth 3, New Jersey (TB 8-49)

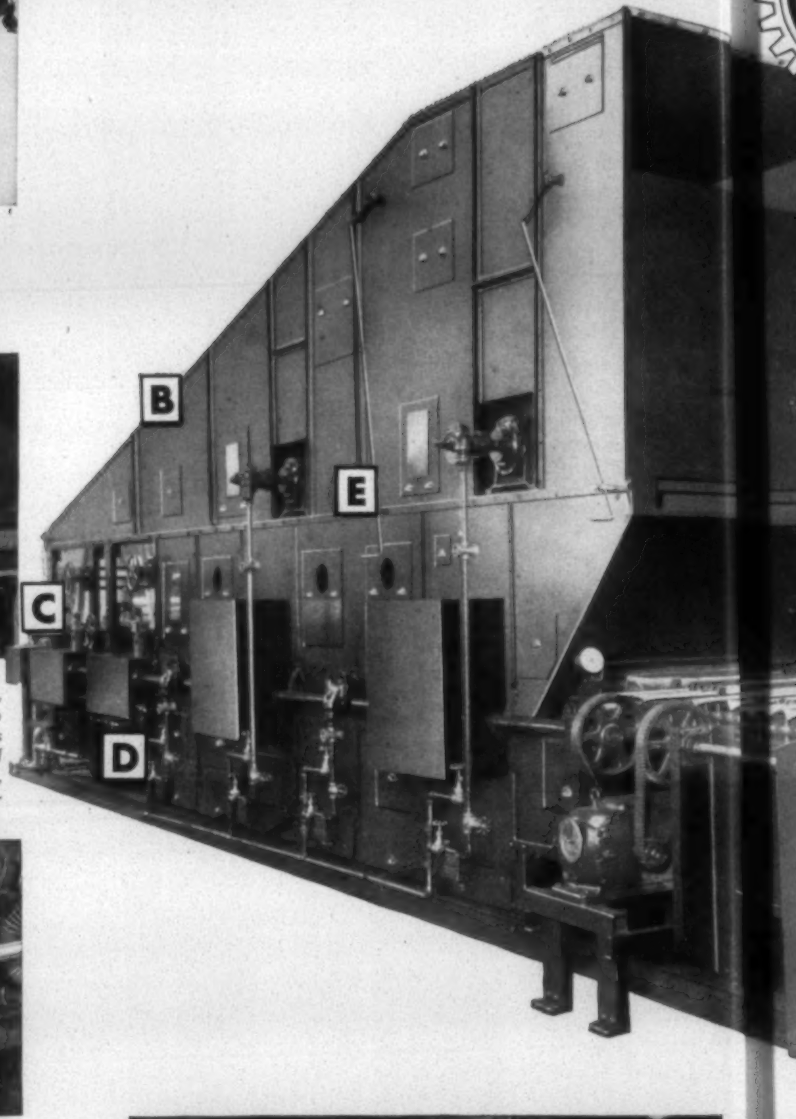
Please send me a free copy of your catalog on Flash-O-Lens Illuminated Magnifiers for Textile Inspection.

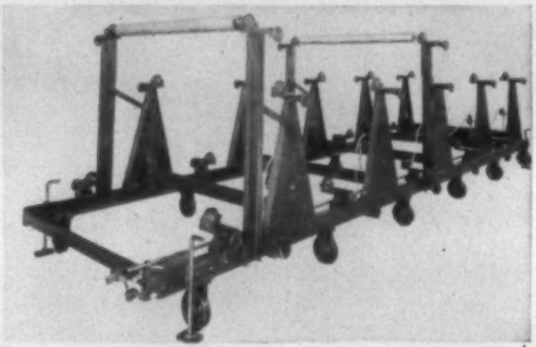
Name .... Title ....

Address ....

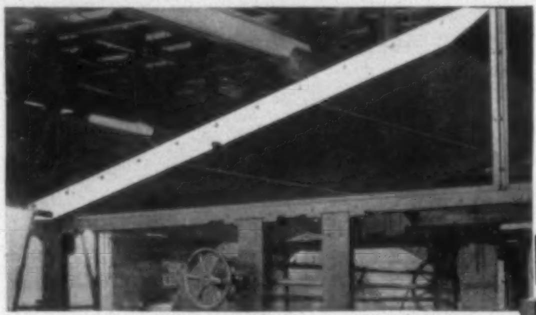
City .... State ....

THE

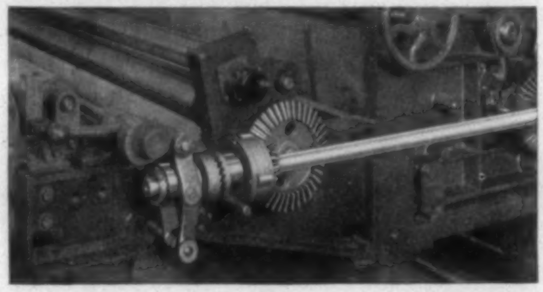




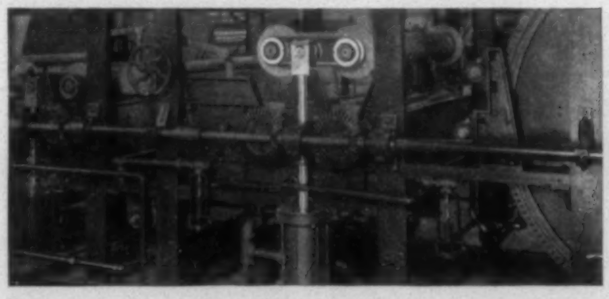
A. 2 MAGAZINE CREELS *are mounted on track-guided casters permitting quick change of beam sets. Creels are equipped with new type friction release eliminating undue yarn strain at high speeds. Creels constructed of heavy steel sections. Beam gudgeons are in anti-friction bearings. Adjustable beam stands provide easy alignment of beams.*



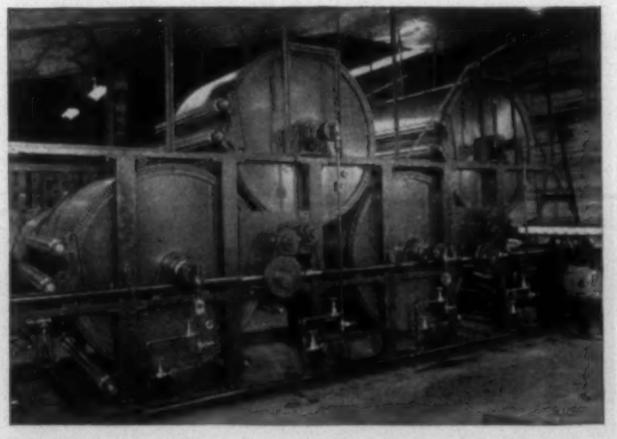
B. STEAM COIL HOOD *over size box area conserves heat, permits high-speed sizing at lower cost. Coils are covered with heavy gauge copper and equipped with temperature controls for accurate regulation, top operating efficiency. A steel and copper hood covers the entire cylinder and size box sections, provides complete removal of vapors and rapid, efficient drying of yarn at lower steam cost.*



C. STRETCH CONTROL UNIT *equalizes yarn tension, delivers yarn to squeeze rolls at uniform speed without stretch, permits slasher to run at higher speeds, delivers yarn of uniform strength and elasticity to weave room and improves weaving efficiency and fabric quality.*



D. PNEUMATIC SQUEEZE ROLL LIFT *eliminates time loss, permits accurate pressure control. Size boxes (either tandem or single) are extra large, sturdily constructed, equipped with 10" brass-ribbed immersion roll, 9" copper size rolls. All carried on heavy, trouble-free antifriction bearings for high speed and high temperature operation.*



E. FOUR 5' CYLINDERS *give increased drying capacity at high speed, temperatures and pressures. All shafting supported in anti-friction bearings. Improved joints on steam and condensation pipes eliminate old style stuffing boxes and glands. Patented gear release on positive drive for cylinders automatically maintains yarn tension.*

HI-SPEED SLASHER

An Efficient, Unified
SLASHING SYSTEM

BETTER QUALITY YARN AT DOUBLE ORDINARY SPEEDS

EFFICIENCY PROVED IN ACTUAL MILL TESTS

AUTOMATIC CONTROLS ON SIZE PREPARATION, CYLINDER TEMPERATURES, YARN STRETCH, SLASHER SPEEDS

LOWER OPERATING COSTS

INCREASED WEAVE ROOM EFFICIENCY

BETTER QUALITY FABRICS

This Hi-Speed Slasher is the result of research and testing. Each element from the magazine type creels to the head end are designed to function as a high-speed production unit.

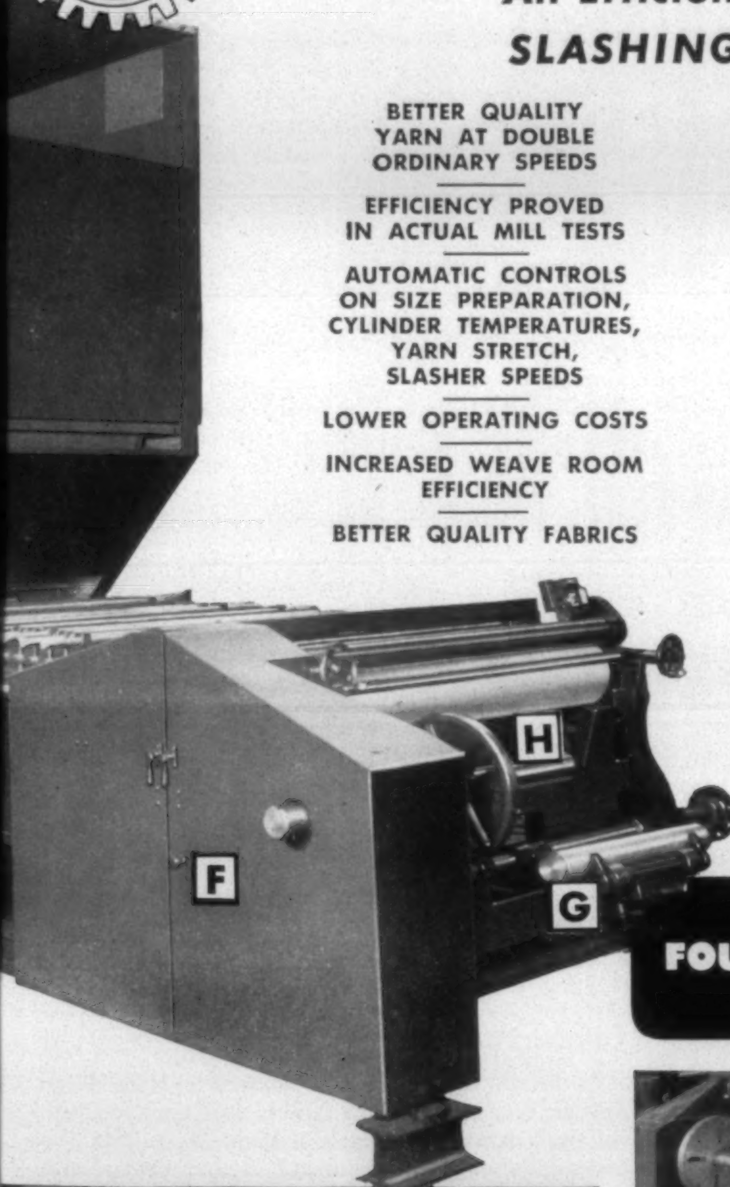
In comparison to an ordinary two-cylinder slasher, limited to 30 to 45 yards per minute, the Hi-Speed Slasher operates efficiently at more than double this, and constantly produces a better quality yarn.

Modern, automatic controls for steam and size temperatures, size level, yarn stretch and speeds assure uniform sizing, elasticity and strength of warp. Costly guess-work adjustments are eliminated.

Because of its high-per-hour output and smooth operating efficiency this advanced Slasher reduces slashing cost to a new low.

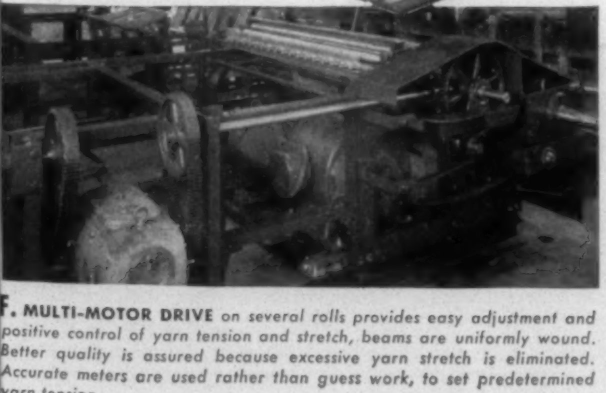
The Hi-Speed Slasher System is strictly a high-production machine, custom built to fill your slashing and production requirements. It will pay for itself by increasing efficiency—lowering production costs.

We will be glad to send you detailed information on its many advanced features. Or, if you like, make a survey in your slasher room.



WEST POINT
FOUNDRY & MACHINE CO.
WEST POINT, GEORGIA

G. TRAVERSING PRESS ROLL *automatically aligns itself with loom beam, uniformly traverses from one loom head to another, permits winding 10% more yarn on each beam smoothly, firmly. Pressure adjusted by easily-set sliding weight.*



F. MULTI-MOTOR DRIVE *on several rolls provides easy adjustment and positive control of yarn tension and stretch, beams are uniformly wound. Better quality is assured because excessive yarn stretch is eliminated. Accurate meters are used rather than guess work, to set predetermined yarn tension.*

H. HEAD END *on the WPF&M Hi-Speed Slasher is vastly improved. Multi-motors replace old style friction and speed cones. Output speed is readily adjusted while running or, at pre-set speeds, the ratio change from low to required speed is automatic and accurate.*

textile bulletin

PUBLISHED MONTHLY BY

CLARK PUBLISHING COMPANY

P. O. Box 1225 . CHARLOTTE 1, N. C. . Telephone 3-3173

— Offices and Plant: 218 West Morehead Street, Charlotte 2 —

DAVID CLARK . . . . *President and Editor*
JUNIUS M. SMITH . . . *Vice-President and Business Manager*
JAMES T. MCADEN, JR. . . . . *Editorial Director*
ERVIN DICKSON . . . . *Associate Editor*
C. MARTIN MICHIE, JR. . . . . *Field Editor*
ANDREW HEWITT . . . . *Assistant Editor*
F. R. CAREY . . . . . . *Vice-President and Eastern Manager*
(P. O. Box 133—Providence, R. I.—Telephone Williams 3957)
BEN C. THOMAS . . . . . . *Field Circulation Representative*
R. J. SHINN . . . . *Field Advertising Representative*

One year payable in advance $1.50
Other countries in Postal Union 3.00
Single copies 15

TEXTILE BULLETIN is a member of the Audit Bureau of Circulations and the Associated Business Papers, Inc.

A New Day Has Dawned

A newspaper report of the recent meeting of the National Education Association held at Boston, Mass., said:

> At a tumultuous session that frequently got out of hand, 3,000 delegates attending the National Education Association convention voted a flat ban against permitting Communist Party members to teach in the nation's schools.
>
> With a scattering of voices raised in opposition—not more than three or four could be heard—the teachers of America made educational history with its action. The National Education Association, with a membership of 425,000 and an affiliated membership of 800,000, is the most powerful and influential school organization in the United States. Its policies are frequently put into practice in schools throughout the land.
>
> The report of the educational policies commission, headed by Dr. John K. Norton of Teachers College, Columbia University, came before the delegates for the first time. This report, prepared by a membership of 20 prominent educators, including Presidents Eisenhower of Columbia and Conant of Harvard, recommended that members of the Community Party be barred from teaching posts.

A newspaper report of Aug. 7, 1949, says:

> Prospective faculty members of the University of North Carolina now are asked to state whether they are, or have been, members of the Communist Party.
>
> The two questions asked prospective faculty members concerning their affiliation with the Communist Party are:
>
> "Are you now, or have you been at any time in the past, a member of, or in any way affiliated, with the Communist Party or with any organization or association controlled, to your knowledge, by Communists? If so, please explain fully."

W. D. Carmichael, Jr., comptroller of the University of North Carolina and acting head since Frank P. Graham resigned to accept an appointment as United States Senator, is quoted as saying:

> As a matter of administrative practice, in recent weeks, all prospective faculty members of the University of North Carolina have been asked to state on their employment applications whether they are or ever have been a member of the Communist Party.
>
> The chief value of the new questions on the application form is that a subsequently proven false reply could be used by the university as grounds for charges, he said.

For more than 20 years, David Clark, editor of TEXTILE BULLETIN, fought against the teaching of Communism and Socialism in schools and colleges, and especially at the Chapel Hill unit of the University of North Carolina.

Because he dared to charge that some members of the faculty at that institution were Communists and that they used their class rooms and lecture periods to sell the Communist doctrine to their pupils, David Clark was abused and vilified by many of the alumni of the institution, by the Raleigh *News & Observer* and other Pink newspapers and by the student newspaper, the *Daily Tar Heel,* as then edited.

Few citizens of North Carolina have had as much abuse heaped upon them as David Clark, and much of it came from alumni who had the idea that, because they had attended the University of North Carolina, they must, even if they knew that Communism was being taught, defend the university against all criticism.

There was the cry of "free speech" falsely raised to give not free speech but "license" to those teachers at the University of North Carolina and elsewhere who sought to use their class rooms to sell Communism to young men and young women.

In the early '30s Paul Blanchard, field secretary for the League for Industrial Democracy, a Communist organization whose motto was "Production for Use But Not for Profit," was a frequent and most welcome visitor at Chapel Hill and he worked in close co-operation with members of the faculty of the university.

An oft-repeated statement by Paul Blanchard was:

> Our hope is in the next generation of workers. We must educate the young. *We must peg into the minds of the young while they are plastic.* We must *bring to the colleges* the most provocative speakers obtainable. We aim to be a ferment upon the campus. We must bring in the most provocative speakers obtainable.

Mary W. Hillyer of the same League for Industrial Democracy always followed Paul Blanchard to Chapel Hill and met with substantial size groups of professors to arrange for a lecture series.

After one of her visits the *Daily Tar Heel* said:

> At the meeting yesterday in Gerrard Hall, plans were discussed for a series of lectures sponsored by the League for Industrial Democracy.
>
> The movement to bring the lecture series to the university has been approved by the Y. M. C. A. cabinets, Amphotreothan Epsilon Phi Delta, and the Di and Phi Societies.
>
> Among the projects treated in the lecture circuit program are: the literature of revolt, America in an interdependent world, socialism of credit, and public utilities and public ownership.

As the result of the schedule arranged by Mary Hillyer, with the co-operation of the faculty, there came to Chapel Hill such men as Karl Borders, Harry W. Laidler, Paul Porter, Norman Thomas, Bertram Russell, atheist and advocate of free love, the Negro Communist Langston Hughes, a writer of sacriligious poetry, and many others.

In every case members of the faculty introduced them to student audiences with words of laudation and students were urged to pay heed to their statements.

Is it any wonder that when World War II came the largest "We Won't Fight" parade of any college in the United States was at the University of North Carolina?

Is it any wonder that a stream of graduates with Red idealogies went out from Chapel Hill and that one of them, Alton Lawrence, led a "flying squadron" in an attack which partially destroyed a hosiery mill at High Point?

David Clark was abused and called a liar many times, during the middle '30s, when he charged that there were

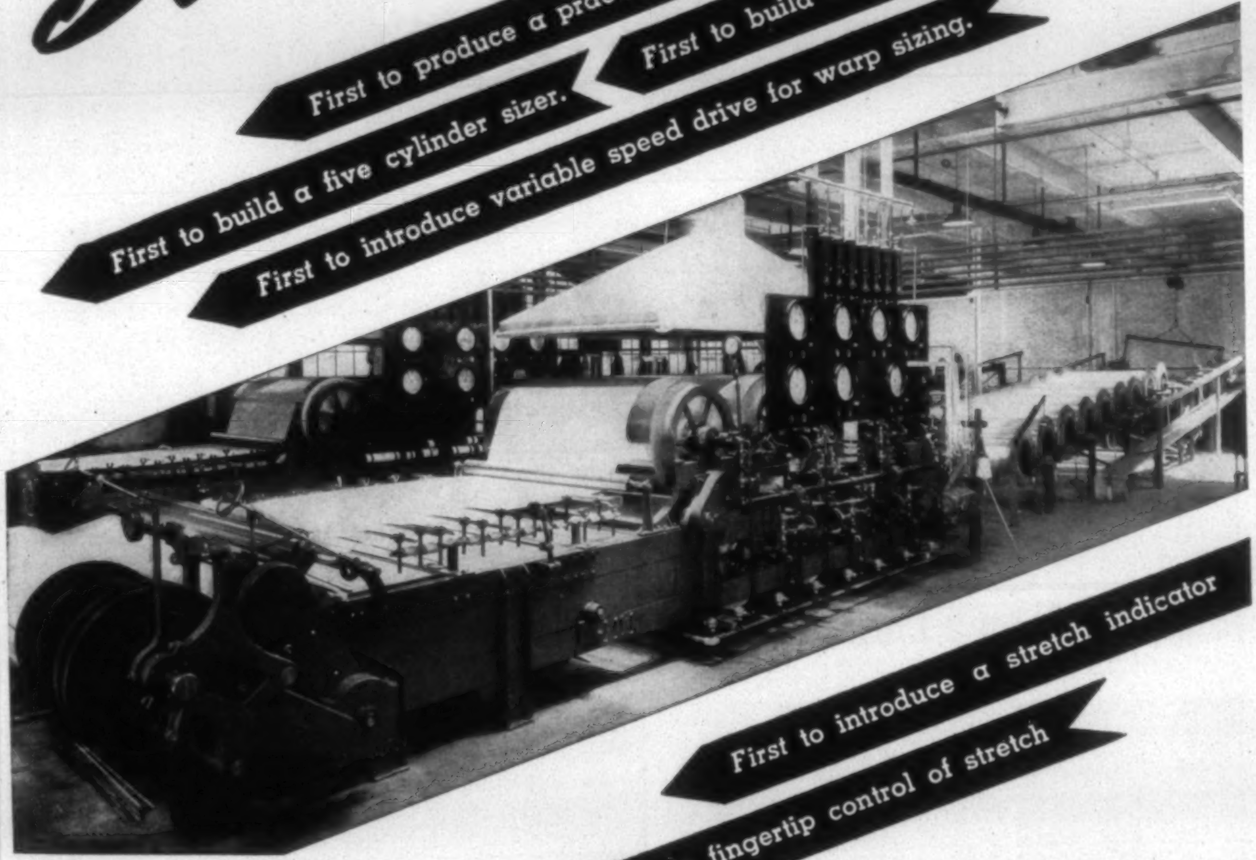
Johnson Firsts

First to produce a practical sizer for rayon warps.

First to build a five cylinder sizer.

First to build a seven cylinder sizer.

First to introduce variable speed drive for warp sizing.



First to introduce a stretch indicator

First to give complete fingertip control of stretch

JOHNSON WARP SIZER

... is the choice of a majority of the leading quality mills in every textile center of the world.

Charles B. Johnson

PATERSON NEW JERSEY

Communists on the faculty of the University of North Carolina.

The *Daily Tar Heel* let the cat out of the bag when upon one occasion it said:

> Arnold Williams, who is remembered on this campus for the introduction of the Communist theory into freshman English courses, has left the university for a position on the faculty of the Missouri School of Mines.

Paul Crouch, a reformed Red, has recently expressed regret for his part in the Communist strike in Gastonia, which occurred about 1932, and said:

> There were 15 to 20 members of the party in Chapel Hill while I was an organizer in the Carolinas.
>
> I know that five or six of these were teachers at the University of North Carolina. One of these, a very distinguished professor, recently left the university.

When David Clark charged that there was an active group of Communists at the University of North Carolina he was called a liar in no uncertain terms and the alumni and radical newspapers heaped vitriolic abuse upon him.

Now Paul Crouch, who was an active Communist then, corroborates the statement made by David Clark.

It appears to us that a new day has dawned.

TEXTILE INDUSTRY SCHEDULE

Sept. 9-11—Summer outing, **SOUTH CENTRAL SECTION, A. A. T. C. C.**, Lookout Mountain Hotel, Chattanooga, Tenn.

Sept. 12-16—Fourth **NATIONAL INSTRUMENT CONFERENCE AND EXHIBIT**, Municipal Auditorium, St. Louis, Mo.

Sept. 16-17—CAROLINAS-VIRGINIA PURCHASING AGENTS ASSOCIATION, Greenville, S. C.

Sept. 26-28—NATIONAL ELECTRONICS CONFERENCE, Edgewater Beach Hotel, Chicago, Ill.

Sept. 29-30—Fall meeting, **SOUTH ATLANTIC COUNCIL OF INDUSTRIAL EDITORS**, Sedgefield Inn, Greensboro, N. C.

Oct. 13-14—43rd annual meeting, **NORTH CAROLINA COTTON MANUFACTURERS ASSOCIATION**, Carolina Hotel, Pinehurst, N. C.

Oct. 13-16—National convention, **AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS**, Chalfonte-Haddon Hall, Atlantic City, N. J.

Oct. 24-28—37th **NATIONAL SAFETY CONGRESS AND EXPOSITION**, Stevens, Congress & Morrison Hotels, Chicago, Ill.

Oct. 27-28—Annual meeting, **CARDED YARN ASSOCIATION**, Sheraton-Bon Air Hotel, Augusta, Ga.

Nov. 3—Annual meeting, **COTTON-TEXTILE INSTITUTE**, Waldorf-Astoria Hotel, New York, N. Y.

Nov. 5—PIEDMONT SECTION, A. A. T. C. C., Charlotte Hotel, Charlotte, N. C.

Nov. 6-8—Second annual **SOUTHEASTERN INDUSTRIAL VISION CONGRESS**, campus of Georgia Institute of Technology, Atlanta.

Nov. 28-Dec. 3—EXPOSITION OF CHEMICAL INDUSTRIES, Grand Central Palace, New York, N. Y.

Jan. 16-19, 1950—PLANT MAINTENANCE SHOW AND CONFERENCE, Cleveland (Ohio) Municipal Auditorium.

Jan. 23-25, 1950—12th annual meeting, **NATIONAL COTTON COUNCIL**, Hotel Peabody, Memphis, Tenn.

March 30-April 1, 1950—Annual convention, **AMERICAN COTTON MANUFACTURERS ASSOCIATION**, Palm Beach-Biltmore Hotel, Palm Beach, Fla.

April 27-29, 1950—Annual convention, **ALABAMA COTTON MANUFACTURERS ASSOCIATION**, Buena Vista Hotel, Biloxi, Miss.

May 8-12, 1950—AMERICAN TEXTILE MACHINERY EXHIBITION (and Allied Industries), Atlantic City (N. J.) Auditorium, sponsored by National Association of Textile Machinery Manufacturers.

May 11-13, 1950—Annual meeting, **COTTON MANUFACTURERS ASSOCIATION OF SOUTH CAROLINA**, Fort Sumter Hotel, Charleston, S. C.

June 12-16, 1950—MATERIALS HANDLING EXPOSITION, International Amphitheatre, Chicago, Ill.

Oct. 2-7, 1950—16th **SOUTHERN TEXTILE EXPOSITION**, Textile Hall, Greenville, S. C.

Oct. 19-21, 1950—National convention, **AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS**, Portsmouth, N. H.

The National Educational Association, which was formerly a supporter of the alleged rights of teachers to teach Communism to their students, votes almost unanimously not to permit Communist Party members to hold positions as teachers in our schools and colleges, and the University of North Carolina is requiring applicants for teaching positions not only to state whether they are now Communists or whether or not they have ever been Communists.

The University of North Carolina will not in the future be a hot-bed for the breeding of Communists.

Frank Graham's sympathies were with the Communists and the teaching of Communism grew at Chapel Hill because of his encouragement and sympathetic understanding. He was one of the sponsors of one of the Summer schools of Moscow University and encouraged young boys and girls to go there and study Communism.

He personally gave financial aid to the Communists in Spain, raised money for them, encouraged American boys to join the Communistic Army there and did his best to get President Roosevelt to lift the arms embargo and let arms go to the Spanish Communists.

He was a member of many organizations such as the "Fellowship of Reconciliation," which were definitely affiliated with the Communists.

He welcomed Communist-front men to Chapel Hill and encouraged students to sit at their feet.

When Frank P. Graham left Chapel Hill, the Communists began to leave like rats leaving a sinking ship and in a short time Chapel Hill will be as free of them as most colleges and universities.

Just as we always had inside information about Communist activities at Chapel Hill we now know that Communism is on its way out at the University of North Carolina.

It is certainly fine to know that the National Educational Association has now gone on record as opposed to allowing any Communist being employed as a teacher in any school or college and that the University of North Carolina now has an administration which, while it believes in free speech, does not intend to allow its class rooms to be used as Communist propaganda forums.

During the past 20 years we have been the recipient of much abuse for daring to call attention to evils which were hotly denied but which are now admitted as having existed.

We are happy to see the sunlight of a new day.

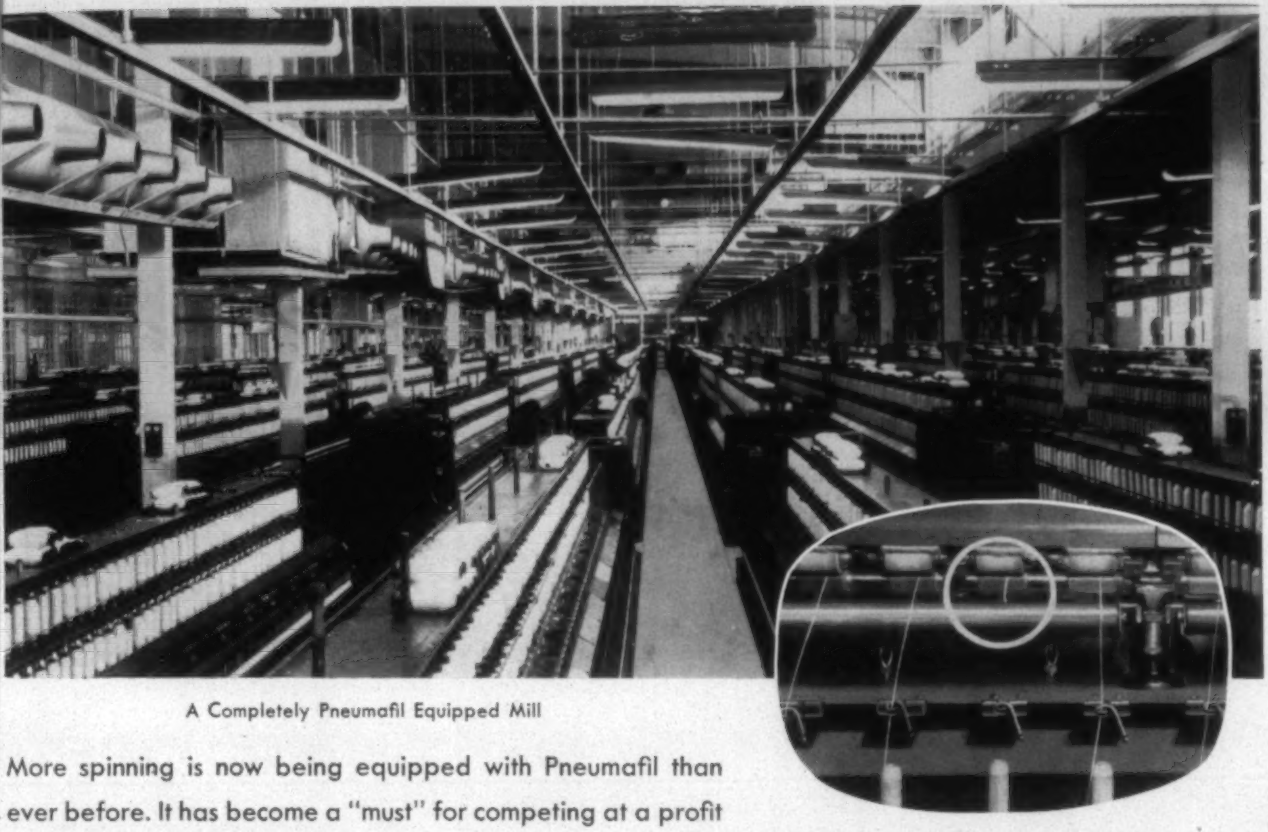
"Right-to-Work" Law

During the three months period from April 1 to June 30, 1949, appeals made to the National Labor Relations Board from North Carolina were less than half the national average for the 48 states, Alaska, Hawaii and Puerto Rico.

During that period 1,082 charges of unfair labor practices were filed throughout the nation but only 16 of them came from North Carolina.

When the C. I. O. and the A. F. of L. were trying to get the North Carolina Legislature to repeal the "Right-to-Work" law, an effort which was overwhelmingly defeated, they claimed that the law caused labor unrest and friction between employers and employees.

The North Carolina "Right-to-Work" Law insures fair treatment of organized labor, unorganized labor and also the employers, and it will never be repealed.



A Completely Pneumafil Equipped Mill

More spinning is now being equipped with Pneumafil than ever before. It has become a "must" for competing at a profit in a buyer's market. Some of the reasons for the greatly increased demand for Pneumafil, as given by users, are:

"Has reduced our spinning costs 10%"

"We have been able to increase frame speeds 18%"

"Has eliminated spinning doublings which formerly were a big problem"

"Our spinners tend more sides and have less work than before"

"Increased value of salvage waste alone pays for the installation"

"We have less ends down and cleaning is reduced appreciably"

"The quality of our yarn is better. There are less end piecings, less slubs and less doublings"

"End piecings are easier to make"

"We produce more yarn per frame"

Pneumafil is paying off through its incomparable ability to help make more and better yarns for less. It is the best investment spinners can make to keep ahead of tough competition and to assure continued profitable operations.

*Registered Trademark

Put Your Mill in Top Competitive Position

With . . .

PNEUMAFIL*

South America and Continental Europe:
Luwa, S. A., Zurich, Switzerland

Canada:
Ian M. Haldane & Co.
P.O. Box 54, London, Canada

Mexico:
Tecnotex, S. A.
Monterrey 101, Mexico, D. F.

Pneumafil Corporation · Charlotte · Boston

For 23 years, Dillard Paper Company has been meeting the paper requirements of Southern industries and institutions with the best paper available —delivered when it is needed. Now there are six Dillard houses to serve you better and faster.

In each branch, Dillard has men who are specialists in all problems of paper and packaging. These men have the knowledge and technical experience to offer constructive suggestions and to advise their clients in the proper use of paper and allied products. By calling Dillard, you can easily satisfy all your paper needs at one convenient source of supply. There is a Dillard branch near you.

If it's paper . . .

Dillard

DILPACO

PAPER COMPANY

GREENSBORO, N. C.
CHARLOTTE, N. C.
WILMINGTON, N. C.
GREENVILLE, S. C.
ROANOKE, VA.
BRISTOL, VA.-TENN.

textile bulletin

VOL. 75 AUGUST, 1949 NO. 8

Advances In Cleaning Cotton At Gins

By F. LEO GERDES, Principal Cotton Technologist in Charge
U. S. Ginning & Fiber Laboratory, Stoneville, Miss.

DURING recent years, the mechanization of cotton production and the associated tendency toward harvesting cotton in a trashy condition have largely been responsible for the attention now being given to providing effective means for cleaning cotton at gins. Cotton gin machinery manufacturers and research agencies have been called upon to develop improved methods for cleaning cotton during the process of ginning. Some new cleaning units, involving modifications of designs of existing equipment and newly conceived principles, have made their appearance in gins. Likewise, attention has been given to the determination of the most effective combinations of cleaning, extracting and drying machines. The program of development and testing of the U. S. Cotton Ginning Laboratory[1] has embraced systematic investigations along this line during the past five years, and recently this work in the laboratory has been supplemented by comprehensive economic and technological studies of cleaning in commercial ginning plants under field operating conditions.

In a cotton gin, the cleaning equipment may range from a separator, four-cylinder cleaner, and extractor feeders to several separators, 20 to 30 or even more cylinders for cleaning, two overhead bur machines, three driers, and large-type double-extractor feeders, the extent of such equipment depending upon the prevailing harvesting practices. These combinations of cleaning machines may be supplemented by the newly developed lint cleaners that are attracting widespread attention in the cotton industry.

In the processes of cleaning cotton at modern, elaborately equipped gins, the seed cotton is drawn from the wagon, truck, or trailer through a ten to 12-inch air pipe connected with a separator fitted with a screen through which the conveying air, laden with fine trash, is exhausted, this process making it possible for the seed cotton to be dropped through a vacuum wheel for placement in an air line. The cotton is then blown through a drying unit by heated air for the purpose of reducing the moisture content and thus facilitating the trash removal action of subsequent cleaning processes and to promote a smoother job of ginning. In an area where sand and unopened, immature bolls are frequently noticeable components of the foreign matter present in the harvested cotton, air-line cleaners or hot air cleaners, fitted usually with four to six, and sometimes as high as 16, cleaning cylinders, are used in the suction line ahead of the separator. The functions of the cleaner are to remove large quantities of sand and some sticks and stems from the cotton, and to open the bolls in a manner to increase the efficiency of subsequent extracting processes.

After the cotton is dried, it is blown or dropped to cylinder cleaners. The conventional cylinder cleaner is equipped with a spiked drum or spider-type cylinder for carrying and "scrubbing" the seed cotton over wire mesh screens through which fine particles of leaf trash, dirt or sand, stems, and small sticks are expelled from the cotton (Fig. 1). Sometimes the suction from a trash-disposal fan is connected with the trash hopper to increase the effectiveness of the cylinder cleaner. The number of cylinders in this cleaner ranges from five to 15. As the cotton leaves this cleaner, it is conveyed to the bur extracting machinery, the function of

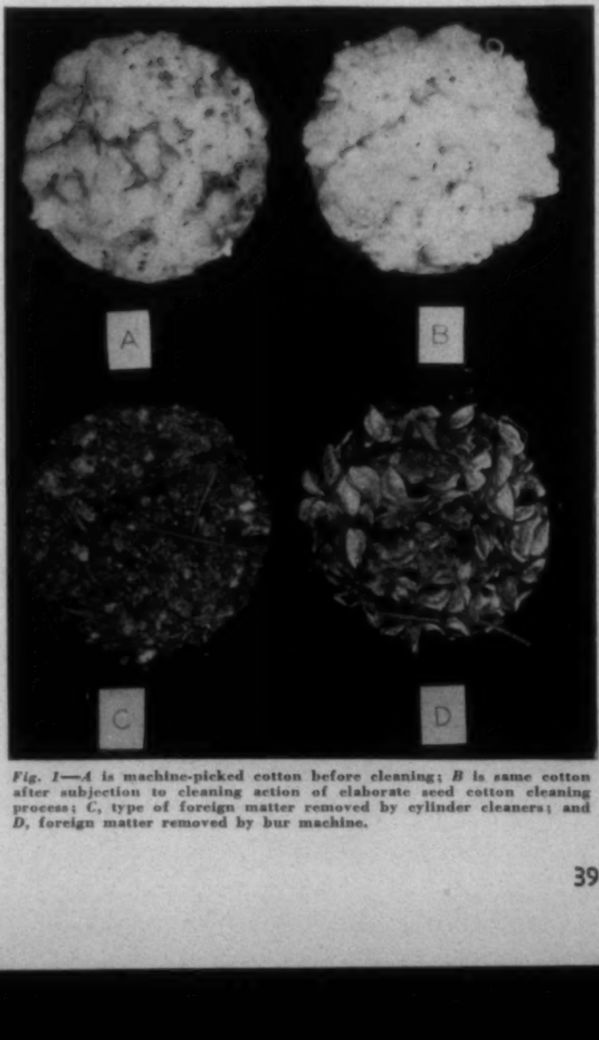


Fig. 1—*A* is machine-picked cotton before cleaning; *B* is same cotton after subjection to cleaning action of elaborate seed cotton cleaning process; *C*, type of foreign matter removed by cylinder cleaners; and *D*, foreign matter removed by bur machine.

---

[1] This laboratory is jointly operated by the Bureau of Plant Industry, Soils, and Agricultural Engineering of the Agricultural Research Administration and the Cotton Branch of the Production and Marketing Administration, U. S. Department of Agriculture.

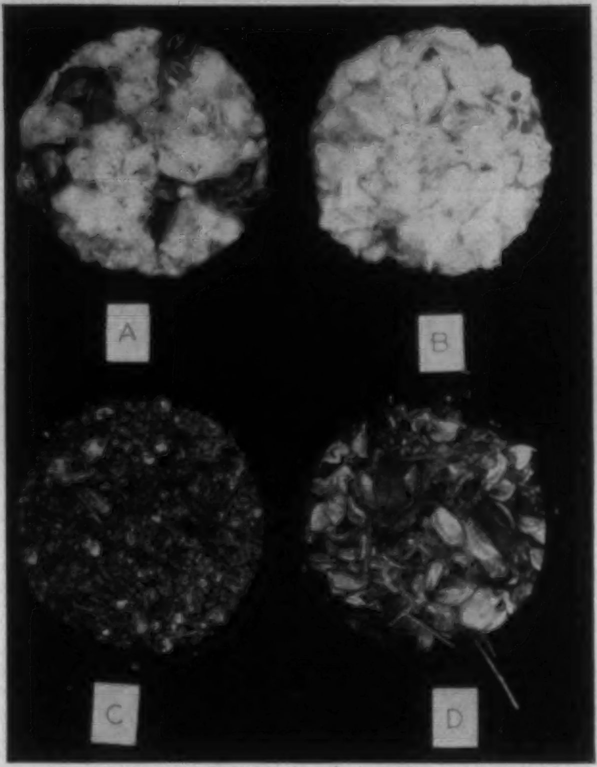


Fig. 2—*A* is snapped seed cotton before cleaning; *B*, same cotton after subjection to cleaning action of elaborate seed cotton cleaning process; *C*, type of foreign matter removed by cylinder cleaners; and *D*, foreign matter removed by bur machine.

which is to remove burs, immature bolls, sticks and stems, as well as fine particles of trash, such as those removed by cylinder cleaners (Fig. 2). In moderate-capacity gins, one bur machine, about ten to 14 feet in width, is used, while in high-capacity, four to six-stand gin plants, the stream of cotton coming from the cleaner may be divided so that one portion is handled by one bur machine, and the other by a second bur machine. These bur machines use a slowly revolving circular saw cylinder which is about 30 inches in diameter. The teeth of the saw hold locks of seed cotton, subject them to a carding and cleaning action as the cotton is spread across the periphery of the saw clinder, and strip them of the heavy trash and burs. These machines also have conventional spiked drum-cleaning cylinders to supplement the cleaning action of the saw cylinder.

After the bur extracting process, the seed cotton is discharged into conventional or newly developed cylinder cleaners for a further cleaning action. At this point, the cotton may be subjected to a drying action and possibly passed through another six or seven-cylinder cleaner, or it may be dried en route from the bur machine to the cleaner. The cleaning at this stage may be a six to 15-cylinder cleaner or two inclined cleaners of six or seven cylinders each. In some cases, a combined bur extracting and large sized cylinder cleaning unit may be used in place of the separate machines heretofore mentioned. The next stage of cleaning comes in the unit extractor feeders after the cotton is dropped into a conveyor distributor and distributed to the feeders. The extractor feeding processes above each gin stand may involve either small or large unit extractors used separately, or a combination of two, one placed above the other, and sometimes contain a cylinder cleaner attachment. Also, these machines may be equipped with drying elements for a final conditioning action on the seed cotton. These units are effective in removing burs, immature locks of cotton, and other foreign material left in the cotton by the overhead cleaning machinery. From the extractor feeders, the cotton is fed to the gin stands at a controlled rate of feeding.

The function of the early model gin stands was primarily that of separating the lint from the seed, but, in modern gin stands, improvements have been made in huller fronts to increase their efficiency in removing large trash particles left in the cotton. Also, much effort has been put forth to improve the moting systems, and some unique principles of moting and double moting processes are incorporated in present-day designs of gin stands.

With the elaborate systems of cleaning cotton prior to ginning just described, tests show that it is usually possible to remove about 80 per cent of the foreign matter from rough hand-picked cotton and mechanically-picked cotton, and 90 per cent from snapped and from machine-stripped cotton. Of course, the gin stand itself supplements, to a small degree, the overhead cleaning action; but, even so, fine particles of vegetative matter, leaf particles, shale, etc., are left in the lint and spread over the fiber to the extent of greatly detracting from the grade with cottons that are roughly hand-picked or mechanically harvested even though this material is small in terms of weight.

Shirley analyzer tests show that, in a 500-pound bale of cotton, the foreign matter left in the lint after using an effective seed cotton cleaning system, ranges from ten to 20 pounds for clean hand-picked cotton having from 50 to 150 pounds of trash when harvested; 20 to 40, from hand-snapped cotton at harvesting time containing 400 to 600 pounds, the bulk of which is burs and stems; from 20 to 40, for mechanically picked cotton having foreign matter composed primarily of green or dry leaf particles amounting to 50 to 75 pounds at picking time; and from 30 to 60, or more, for machine-stripped cotton which at harvesting time generally contains from 800 to 1,200 pounds of sticks, stems, burs, and other foreign material like green bolls and leaves.

Limitations of Seed-Cotton Cleaning Machinery

Conventional means for cleaning seed cotton at gins, including cylinder cleaners, bur extractors, and driers are relatively effective in removing leaf trash and large particles of foreign matter from seed cotton, but there is a limit to their usefulness with respect to preserving certain fiber qualities while bringing about grade improvement in the resulting ginned lint. Usually roughly hand-picked or mechanically harvested cotton shows grade improvements of one-third to one-half grade when subjected to the cleaning action of elaborate cleaning processes as compared with being cleaned by equipment generally used on clean hand-picked cotton. The use of too much machinery in cleaning cotton at gins has a tendency to increase the neps when the ginned cotton is processed at mills. These undesirable effects, as brought out in spinning tests of the Cotton Branch, can be avoided if the seed cotton is not subjected to more than 24 to 26 cylinders of cleaning on cotton $1\frac{1}{32}$ to $1\frac{5}{32}$ inches in length.

The practice of using too much gin-cleaning and drying equipment, if not curbed, can result in serious difficulties for spinners because of the adverse effects of "overmachining" and "overdrying" seed cotton prior to ginning. If too many cylinders in relation to the staple length of the cotton are used in cleaning, the locks have a tendency to rope and the resulting ginned lint will have a tangled or machine appearance; and, if too much heat is used in drying, the lint ginned from overdried cotton may have an objectionable appearance and the fiber length and strength may be adversely affected. In the short-staple producing areas, like west Texas and western Oklahoma, the limits of cylinder cleaning are considerably higher than in the longer staple cotton-growing sections. However, regardless of the staple length of the cotton, fiber damage from overdrying is ever present at gins.

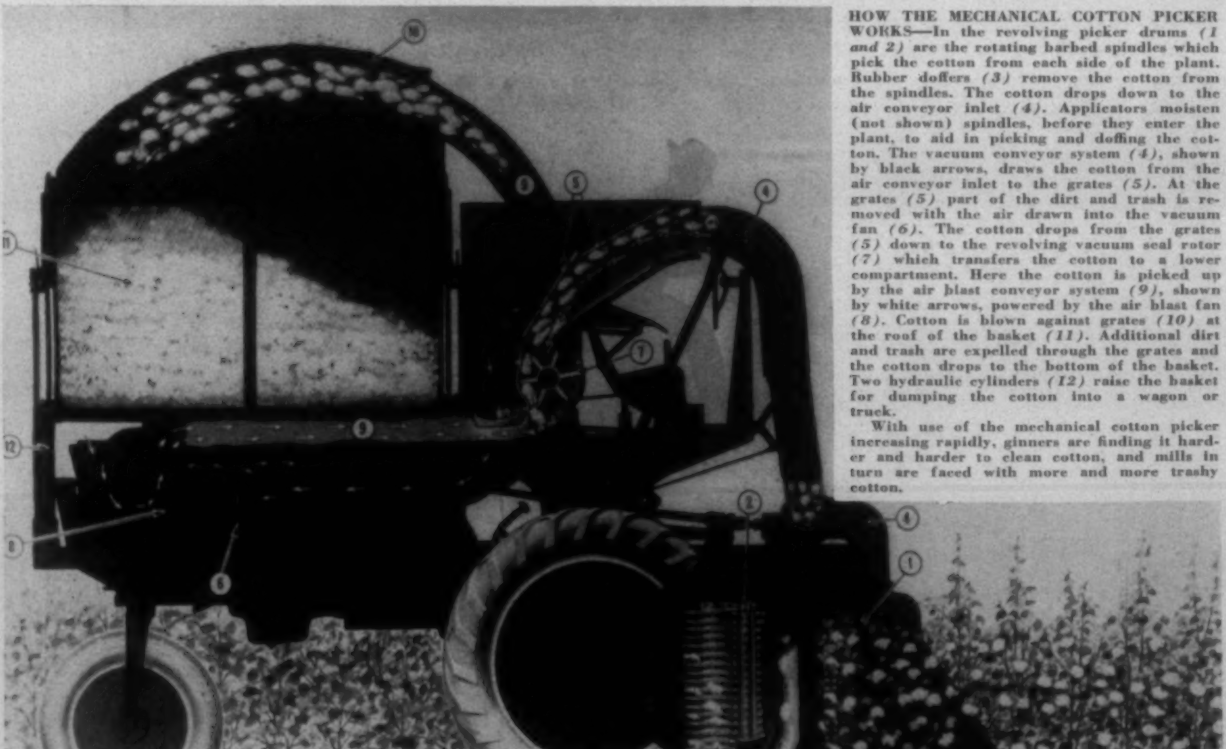
Seed cotton must be relatively dry before cleaners will perform at their maximum efficiency. It is for this reason that overdrying is sometimes practiced. While this may increase grade benefits, the resultant fiber length may be adversely affected during the process of ginning. This problem is now receiving attention in research programs to the extent of determining the possibilities of humidifying or conditioning after cleaning the overdried cotton as well as cotton received at gins in a subnormal moisture condition. In pilot tests, it has been found that proper conditioning at this point in the ginning processes will aid in preserving fiber length.

There are other problems limiting the use of elaborate cleaning processes at gins. For example, when seed cotton containing an excess of burs, sticks, or stems is subjected to the action of these processes, there is a tendency at times for shredded particles of stem bark, shale from burs, and leaf trash to be left in the seed cotton and to be carried over into the ginned lint to some degree. Another problem that is giving ginners concern is the matter of cleaning seed cotton containing green or frost-damaged immature bolls when the cotton is hand snapped and stripped. The immature locks extracted from these bolls may be of such poor quality as to significantly lower the quality of the lint. At times, seed particles of the immature seed are chipped during the ginning process. These defective particles may remain entagled with the fiber, not only causing fiber neps but also staining the fiber with cottonseed oil of high free-fatty-acid content to the extent of causing trouble in bleaching yarn spun from cotton so contaminated.

Development of Lint-Cleaning Processes

In view of the limitations of seed-cotton cleaning processes as heretofore discussed, it has been concluded by the U. S. Cotton Ginning Laboratory and gin manufacturers that new principles of cleaning cotton at gins need to be found to supplement the best practices of seed-cotton cleaning. Considerable effort is being put forth by all concerned with this problem to provide new methods of cleaning in order that ginners will not have to resort to the use of extensive cylinder cleaning and high air temperatures in drying in their efforts to provide cleaner lint at gins.

Work in the field of development of new processes of cleaning has been carried out in recent years, the lint cleaner having been devised as a supplementary means for cleaning lint ginned from seed cotton previously subjected to the cleaning action of conventional cleaning processes used in proper sequences. The progress made to date in this field by the U. S. Cotton Ginning Laboratory and cotton-gin machinery manufacturers is due to the co-operative approach to the problem and the encouragement and support given by producers and ginners. This interest on the part of all



HOW THE MECHANICAL COTTON PICKER WORKS—In the revolving picker drums *(1 and 2)* are the rotating barbed spindles which pick the cotton from each side of the plant. Rubber doffers *(3)* remove the cotton from the spindles. The cotton drops down to the air conveyor inlet *(4)*. Applicators moisten (not shown) spindles, before they enter the plant, to aid in picking and doffing the cotton. The vacuum conveyor system *(4)*, shown by black arrows, draws the cotton from the air conveyor inlet to the grates *(5)*. At the grates *(5)* part of the dirt and trash is removed with the air drawn into the vacuum fan *(6)*. The cotton drops from the grates *(5)* down to the revolving vacuum seal rotor *(7)* which transfers the cotton to a lower compartment. Here the cotton is picked up by the air blast conveyor system *(9)*, shown by white arrows, powered by the air blast fan *(8)*. Cotton is blown against grates *(10)* at the roof of the basket *(11)*. Additional dirt and trash are expelled through the grates and the cotton drops to the bottom of the basket. Two hydraulic cylinders *(12)* raise the basket for dumping the cotton into a wagon or truck.

With use of the mechanical cotton picker increasing rapidly, ginners are finding it harder and harder to clean cotton, and mills in turn are faced with more and more trashy cotton.

concerned is based primarily on the fact that, without effective means for cleaning mechanically harvested cotton at gins, producers cannot avoid the heavy discounts on the low grades and thus realize sufficient benefits from mechanization to make it economically feasible. Also, mill complaints from overmachining and other objectionable features of cleaning seed cotton could result in rejections and impair the market outlet for machine-picked cotton.

Development Work on Lint Cleaners

At the outset of the development work on lint cleaning, it was realized that a means for combing or brushing the fine trash particles from the fiber was needed and the process to accomplish this objective should be of such design that no mechanical damage is done to the fiber. The machine, or its processes, should have a capacity of at least 1½ bales of lint per hour in order for the cleaning to be effected without retarding the ginning process. In the early work, numerous machines and principles were explored, including such known devices, either in use or described in patents, as a double-process gin, a conventional regin, a commercial spiral whirl mill cleaner, and a beater-type mill cleaner. Also, several units using different air flotation principles were built and tested. This work failed to yield any promising leads, and then a double-saw principle of cleaning in the form of a pilot model was devised and tested.

Excellent cleaning results were obtained of the double-saw cleaner. Grade benefits averaging two-thirds grade were derived in systematic tests. However, this device had a tendency to machine the cotton to the extent of lowering the yarn quality of the resulting cleaned lint. This led to the development of a design involving one saw cylinder cleaner behind each gin stand in an effort to clean the cotton at gin-stand capacity without harming the fibers (Fig. 3). In this continuous process of cleaning, the ginned lint is blown by the air-blast of the gin stand to the lint cleaner units' revolving screen from which much air is exhausted and the lint and remaining air are directed to the saw cylinder of the lint cleaner, the teeth of which engage the fiber and carry it over grid bars, after which the fiber is doffed by a conventional airblast and delivered to the lint flue. Trash removal is accomplished by a combination of gravity, centrifugal force, and combing action on the lint as it is pulled over the grid bars.

Technological Evaluations of Lint Cleaners

In the lint-cleaning development work on full sized units, it was definitely concluded that the lint had to be fed gently to a single saw assembly operating in combination with suitable grid bars in such manner that the fibers would not be harshly treated. With fiber and spinning-test data available in connection with tests on each succeeding model of cleaner, the device finally perfected has met all the requirements of lint cleaning, namely, it significantly improves the grade of the lint without nepping the cotton or removing usable fiber with the trash; it has a capacity equal to or better than that of a gin stand; and it can be driven without excessive power consumption. Tests recently completed on the lint cleaners, operating a full season in the three-80 laboratory saw-gin outfit, definitely proved that lint cleaning is generally more effective in improving the grade of cotton than additional overhead drying, cleaning, and extracting machinery of comparable cost to the ginner.

The lint cleaner is effective in removing fine trash, particles of vegetative matter, motes, shale, and other foreign matter as well as tangled fiber and some short waste fiber (Fig. 4). The fibrous material removed consists of immature fiber and neps, and amounts to one to two pounds per bale regardless of the trashiness of the lint cleaned. The lint cleaners produced grade improvements averaging two-thirds grade on lint ginned from cotton machine picked during early and midseason of the Fall of 1948 and previously subjected to either moderate or elaborate seed-cotton cleaning. Grade improvements resulting from lint cleaning ranged, on the average, from one-third to two-thirds grade on the various lots of late-season machine-picked cotton subjected to different degrees of seed-cotton cleaning. On all cotton, staple length was not affected by lint cleaning.

The amount of lint-cleaning waste expelled from the machine-picked cotton depended upon the trashiness of the

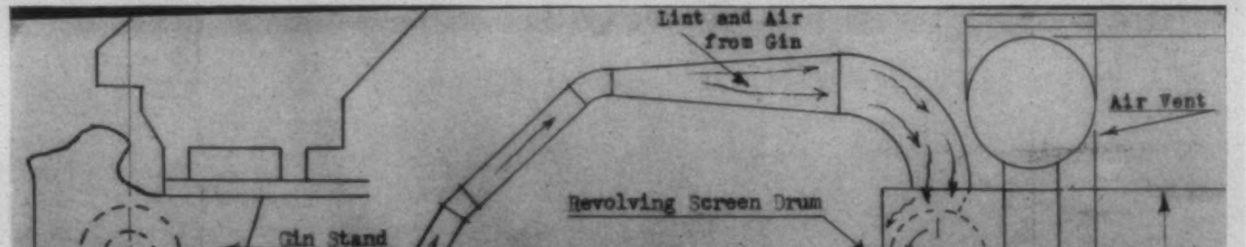


Fig. 3—Side elevation showing installation of government-designed lint cleaners in a three-stand cotton gin.

Sterling
Ring Travelers

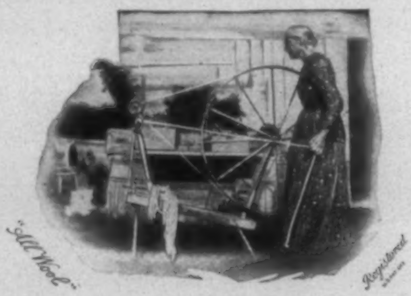
QUALITY

In these times, quality and low cost often mean the difference between running or closing.

Sterling Ring Travelers will improve your Spinning and Twisting, also cut your cost. Try them.

H. B. CABANISS
Box 188, Monroe, N. C.
M. R. CRANFORD
Box 204, Chester, S. C.
D. R. IVESTER
Box 882, Clarkesville, Ga.

STERLING RING TRAVELER CO.
FALL RIVER, MASS.



KNOXALL

Roller, Slasher and Clearer Cloth
Endless Blankets
Rayon Slasher Jackets
Endless Revolving Clearers

EDWARD H. BEST & CO.
EST. 1888 BOSTON, MASS. INC. 1901

ATLANTA, GA.
W. C. HAMES
185 Pinecrest Ave., Decatur, Ga.
Dearborn 5974

NEW YORK
H. W. CURTIS
735 W. Crescent Ave., Allendale, N. J.
Allendale 1-3521

GREENVILLE, S. C.
WILLIAM J. MOORE
1 Pendleton Street
Greenville 7646

You Are Not Merely
a File Card With
HENLEY!

ON THE CONTRARY, you are recorded as requiring certain types of paper, cordage or paper specialties.

Your special needs—your individual requirements—become a part of the HENLEY register, so that service may be prompt, accurate, satisfactory! And this attitude prevails from the time our representative takes your order, until the shipment leaves the loading platform.

Throughout all the area served by our four service and warehouse centers, manufacturers find that HENLEY service is individualized service.

If co-operation like this represents service you would like to have—let's work together!

Please Address All Inquiries
to our High Point Office

HENLEY PAPER Company
Formerly—
PARKER PAPER CO.

Charlotte, N. C. HIGH POINT, N. C. Gastonia, N. C.

Southern Paper Products Division, Asheville, N. C.

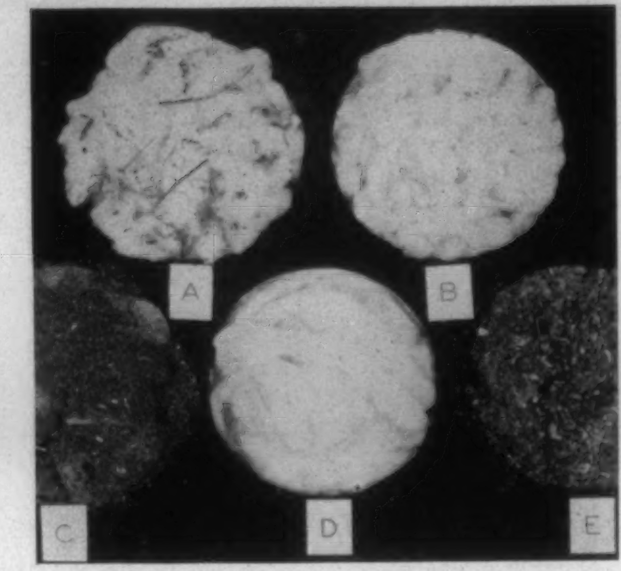


Fig. 4—**Machine-picked seed cotton *(A)* before cleaning; *B*, after subjection to cleaning action of elaborate seed cotton cleaning process; *C*, waste as removed by lint cleaners; *D*, its components of short fibers; and *E*, components of trash after processing through Shirley analyzer.**

seed cotton and the degree of seed-cotton cleaning to which it was subjected prior to ginning, ranging from eight pounds on early to 11 pounds per bale on late-season cotton representing moderate seed-cotton cleaning, and six to eight pounds per bale for the respective stages of harvesting for cotton cleaned by the elaborate seed-cotton cleaning process. This trash removal resulted in reductions in manufacturing losses of about one to two per cent. Lint cleaning had no effect, favorable or adverse, on the nep count in the card web or appearance grade of the yarn, nor on the strength of the yarn.

For the hand-picked cotton, lint cleaning was the only process which showed significant grade increases on early and midseason cotton, but for the late-harvested cotton, there was generally a tendency for the hand-picked cotton to show increasingly higher average grades as additional cleaning and drying machinery was used. Nevertheless, the lint cleaners showed additional grade benefits averaging about one-third grade with all seed-cotton-cleaning combinations. Lint-cleaner waste ranged from less than four pounds on early-season clean cotton to about nine pounds per bale on late-season exposed hand-snapped cotton with either the moderate or simple seed-cotton cleaning process. Spinning tests on the late-season hand-picked, and late-exposed hand-snapped cotton showed favorable effects on manufacturing loss due to lint cleaning with no consistent adverse effects on neppiness of the card web and appearance grade and strength of the yarn.

Technological Evaluations of Lint Cleaners

In addition to making evaluations of the quality of ginning on the laboratory gin equipped with lint cleaners, extensive field studies have been made on the quality of ginning on almost one-half of the commercial gins operating factory designs of lint cleaners in 1948. Last season, installations of lint cleaners were made throughout the cotton belt from North Carolina to California. More than 100,000 bales of cotton were handled by the 28 ginning plants equipped with these units.

As in the laboratory tests, the field studies proved that the lint cleaners greatly improved the grade of the lint without impairing other quality elements of the fibers. The removal of trash by the lint cleaners contributed to lower manufacturing waste on the lint-cleaned cotton than on that not subjected to lint cleaning. The difference in favor of lint cleaning was generally about one per cent; that is, five or six pounds per bale. Yarn strength was not adversely affected by lint cleaning, and neither did yarn appearance show any significant differences unfavorable to lint cleaning. Usually, the grade benefits from lint cleaning averaged from one-third to two-thirds grade, depending on the method by which the cotton was harvested. In the high plains area, where hand snapping and machine stripping is practiced, lint cleaning reduced the percentage of spotted cotton below that of ginnings made without lint cleaning. In the study in this area, over 50 per cent of the cotton was improved one full grade by lint cleaning.

Trend of Future Developments

With proof through laboratory tests and field experiences that seed-cotton cleaning up to a certain point is desirable, and that beyond certain limits there are objectionable features from the standpoint of costs and benefits, ginners have become conscious of the need to view with caution the matter of equipping gins to clean cotton. It is only when significant quantities of machine-picked or roughly harvested cottons are ginned that there is justification for elaborate seed-cotton cleaning equipment. Usually, under such conditions, two drying systems, along with two or three overhead cylinder cleaners and extracting equipment installed in proper sequence, and extractor feeders are essential in order to obtain noticeable grade improvements without the use of lint cleaners. The economic feasibility of more extensive seed-cotton cleaning equipment is questionable and the possibility of damage to certain fiber quality elements is ever present with excessive use of equipment of this kind.

With proof of the practicality of lint cleaning from an engineering standpoint and of its technical and economical feasibility ginners are installing lint cleaners in lieu of some of the overhead seed-cotton cleaning equipment in order to provide higher grade lint from machine-picked cotton without damaging fiber properties and adversely affecting its spinning value. Moreover, efforts are being made by the laboratory and gin manufacturers to bring about improvements in lint cleaners, and in the gin moting systems as well as in bur extractors to make them more efficient in cleaning.

In all of these developments, more effective means for increasing grade improvements are being sought with a view of sacrificing no important element of spinning quality. The new devices under development and the lint cleaners will likely be used in such a manner that many of the objectionable features of seed-cotton cleaning may be overcome. This will enable the producers to market a product from mechanically harvested cotton that will command a price sufficiently high as to make mechanization economically feasible. Under present market conditions, it is imperative that a high proportion of mechanically harvested cotton have a value of at least strict low middling grade to make mechanical picking a profitable venture. During the forthcoming season, there will be approximately 150 gins equipped with lint cleaners to improve the grade of rough

A New

SPRAY-APPLICATION TECHNIQUE

for

TEXTILE PROCESS COMPOUNDS

MINOTINTS

Oil-base fugitive tints for all synthetic and natural fibers.
Identification—Lubrication—Conditioning

RAYON OILS	SS BASE OIL
TINTINOLS	MINEROL
LYNOL	MEON

BRETON OILS FOR WOOL

Accurate trouble-free application of spraying oils and tints by the new pressure method which eliminates pumps and moving parts. Simplification is progress and ours is backed by 75 years' experience.

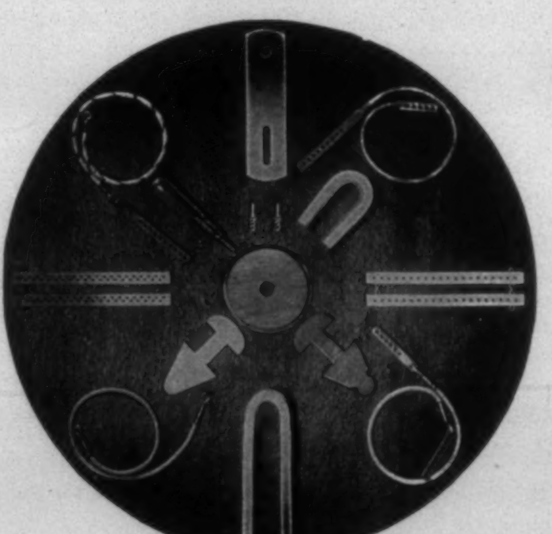
INQUIRIES INVITED

BORNE SCRYMSER COMPANY

Offices and Works	Established 1874	Southern Warehouse
ELIZABETH, N. J.	*75th Anniversary*	CHARLOTTE, N. C.

RICE DOBBY CHAIN CO.

MILLBURY, MASS., U. S. A.



Southern Representative
R. E. L. Holt, Jr. Associates
Jefferson Bldg. P. O. Box 1474 Greensboro, N. C.
(READY TO SERVE YOU)

WARPER TENSION DISCS

Hard Chromium Plated

· GREENSBORO · LOOM REED CO., INC.

GREENSBORO, N. C.

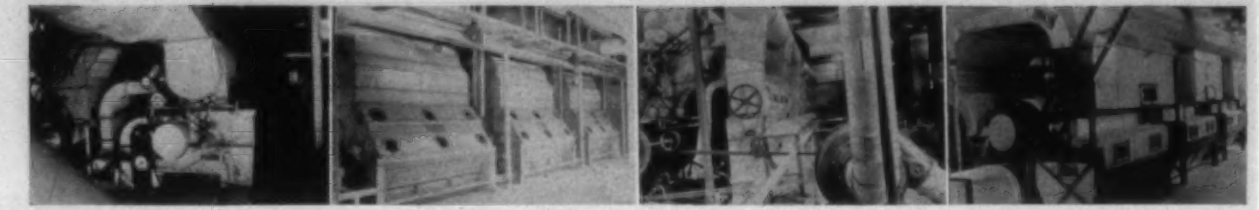


Fig. 5—First three views, *left to right*, show commercial types of lint cleaners, and view at *far right* is government design of lint cleaner.

hand-picked and mechanically harvested cotton (Fig. 5). It is estimated that more than one-half million bales of cotton will be handled by these gins, a high proportion of which are located in the areas where needed.

With lint-cleaning services costing the ginner no more than $1 per bale on gins with volumes of 3,000 bales and the benefits usually ranging from about $5 to $10 per bale, it may readily be seen why producers and ginners have been so quick to adopt this method of cleaning mechanically harvested cotton as a supplement to conventional means of seed-cotton cleaning. As compared with gins having standard machinery for cleaning hand-picked cotton, gins especially equipped with elaborate seed-cotton cleaning equipment and lint-cleaning units will improve the grade of machine-picked cotton one full grade, or provide bale value increases as high as $20 per bale. This combination of cleaning equipment may be so operated that many of the current objectionable physical characteristics of machine-picked cotton may be overcome. Moreover, an effective cleaning system at gins should enable producers to harvest cotton mechanically before undue exposure to weather damage, and may actually provide cotton characterized by better fiber quality than that associated with the practice of delayed harvesting by hand as has been the case with the large crops and labor shortages in recent years.

Mr. Gerdes delivered the foregoing paper last June before the annual convention of the Southern Textile Association at Blowing Rock, N. C.

Dedicate New Textile Building Oct. 14

The 50th anniversary of the A. French Textile School of the Georgia Institute of Technology, Atlanta, and the opening of its new $1,025,000 W. Harrison Hightower Textile Building with its almost $1,000,000 of equipment will be observed with special ceremonies Oct. 14, according to Prof. Herman A. Dickert, director of the school. The celebration is being sponsored jointly by the institute, the Georgia Tech Alumni Association, the Georgia Cotton Manufacturers Association, the Textile Education Foundation of Georgia, and others. It was through the efforts of these agencies, led by the foundation, that state and private support was obtained for the construction of the new building and its equipping with the most modern textile machinery, instruments, classrooms, and laboratory facilities.

Preliminary program plans include guided tours through the building and an inspection of machinery and equipment, which will be described and demonstrated by representatives of their manufacturers. Following an informal luncheon in the Georgia Tech dining hall, opening exercises will be held in the auditorium of the new building. Official guests will include outstanding political, educational, financial and industrial figures. Georgia Tech President and Mrs. Blake R. Van Leer will be hosts after the exercises at a tea and reception in the president's home given in honor of those making the new building possible. It is contemplated having a banquet in the evening which will be addressed by a speaker of international prominence.

On Saturday morning, Oct. 15, the building will be open to the general public who will be given guided tours through the laboratories and other places of interest. The opening festivities will be concluded with the varsity football game between Auburn and Georgia Tech in the afternoon at Grant Field.

$65 Million For E.C.A. Textile Machinery

An official estimate on the value of textile machinery Marshall Plan countries will import from the United States during the coming fiscal year is set at $65 million. The estimate is contained in a report by the machinery section of the Organization for European Economic Co-operation in Paris—the group which draws up the various Marshall Plan programs.

The bulk of the figure—45 million dollars—is earmarked for cotton textile machinery and is broken down as follows: $10,912,000 for processes preparatory to spinning; $13,098,000 for cotton spindles; $20,981,000 for automatic looms for weaving all types of fibers, and $804,000 for non-automatic looms. The balance—20 million dollars—is slated for machinery for processing wool, jute, flax, hard fibers (manila and sisal), knitting and industrial sewing machinery and specialized equipment.

The 65 million dollar plan is subject to revision, depending on several circumstances. Congress is presently thrashing out the Economic Co-operation Administration appropriations bill for this fiscal year, June 30, 1949, to June 30, 1950. If the funds are slashed considerably, the countries will then have to review their programs and decide on what imports should have priority.

Industrial Editors To Meet Sept. 29-30

The annual Fall meeting of the South Atlantic Council of Industrial Editors will be held Sept. 29-30 at Sedgefield, near Greensboro, N. C. An attendance of 75 to 100 is expected for the meeting. Charles D. Orth of Burlington Mills Corp., Greensboro, is president of the council and Marion W. Heiss, executive vice-president of Cone Mills Corp., Greensboro, will be one of the speakers at the meeting.

The first cotton mill in Alabama was located near Huntsville on the Flint River. It was incorporated by the legislature in 1832. Put into operation as the Bell Factory of the County of Madison, the concern derived its name from the fact that a bell instead of the customary steam whistle was used to call the employees to work.

Nearly three-quarters of the carpet looms in America were still operated by hand in 1869.

No Other Roving Can Will Give Better Service

The Silver King Roving Can lasts longer, stays in better condition at all times, and decreases handling costs.

- Light in Weight
- Resists Scuffing
- Exceptionally Strong
- Resists Abrasion
- Will not absorb oils, gasoline or most solvents

The Silver King Roving Can is the lowest priced can on the market.

Southern Agents:

Va. and N. C.
OLIVER D. LANDIS, Inc.
718 Queens Rd., Charlotte, N. C.

Ga., Ala., Tenn.
J. W. DAVIS
122 Dillingham St., Columbus, Ga.

S. C.
RALPH GOSSETT
15 Augusta St., Greenville, S. C.

You Get—

QUALITY SERVICE
AND ACCURACY

When you have your Spindles, Pressers, Flyers, Steel Rolls & Picker Aprons reconditioned by

NORLANDER-YOUNG

MACHINE COMPANY

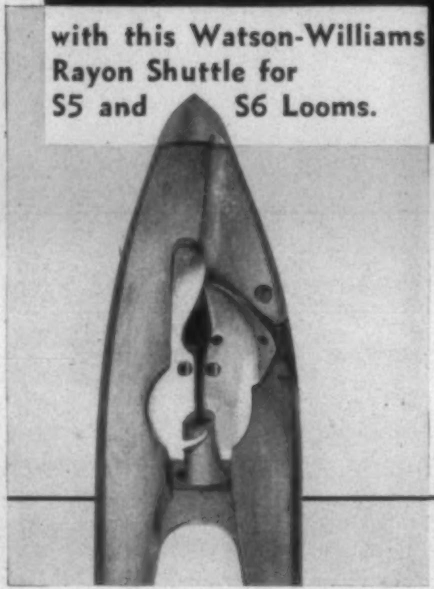
York Road — Phone 5-4022
GASTONIA, N. C.

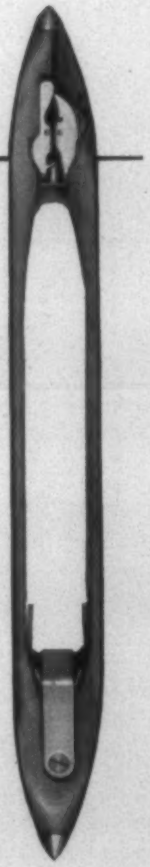
☆

OUR MOTTO QUALITY AND SERVICE AT A MINIMUM COST
Has realized thousands of repeated orders

Say Farewell to REVERSE WIND FILLING TROUBLES

with this Watson-Williams Rayon Shuttle for S5 and S6 Looms.





Even with crepe filling, one of the major problems of rayon weaving, this S7X Center Tension Eye Shuttle for Reverse Wind (S7 for Regular Wind) holds the thread in perfect alignment and constantly down in place. Word has already spread from one mill to another that again, a Watson-Williams shuttle improvement has solved a real difficulty — reverse wind rayon filling troubles. The extra narrow slot in the eye, the shuttle's full shoulder at the front of the bobbin chamber, and the generous-sized, precision-made hook combine to keep the filling always straight before it reaches the steel encased tension pads. These tension pads are so constructed that the filling is kept from ever working behind the pads. Say farewell to this problem in your mill, by sending a sample order today.

WATSON-WILLIAMS MFG. CO.

MILLBURY, MASSACHUSETTS

SOUTHERN REPRESENTATIVES: Watson and Desmond, Box 1954, Charlotte, N. C., John W. Littlefield, 810 Woodside Bldg., Greenville, S. C., Walter F. Daboll, Jefferson Bldg., Greensboro, N. C.

NORTHERN REPRESENTATIVE: Guy C. Burbank, 32 Beaconsfield Rd., Worcester 2, Mass.

New— SONOCO *Cone Surface*

For Low Twist Fine Filament Yarns—

Paper Carriers For Every Textile Need

Continuous laboratory research, seeking a more perfect cone surface, particularly as desirable for fine filament, low twist, synthetic yarns, has resulted in UNITEX—a flocked surface—applied to a smooth finished cone, either banded, as illustrated, or solid, if required.

SONOCO 50th SERVES THE WORLD ANNIVERSARY YEAR

SONOCO PRODUCTS COMPANY

BRANTFORD ONT.
HARTSVILLE S. C.
MYSTIC CONN.

DEPENDABLE SOURCE OF SUPPLY

Opening, Picking, Carding & Spinning

THE MILL OF TODAY

By ROBERT Z. WALKER

Part 14—Maintenance of the Card Lickerin Assembly

AFTER inspecting and reconditioning the feed plate and its subsidiary assemblies, the lickerin, its screen and the mote knives should be examined, repaired if necessary and reset. These working parts back of the card are far more important than is generally realized, for it is here that the fibers are being separated for presentation to the carding surfaces of the card. A great deal of the efficiency of the carding action is determined by the manner in which the fibers are handled before they reach the carding wire. When the feed plate and lickerin assemblies are set and operating correctly the fibers will be fed forward to the wire of the cylinder in small well opened groups that are very susceptible to the carding action of the wire. On the contrary, if the fiber is still collected in small tight groups there is a tendency for these groups of fibers to become entangled and to roll between the wire of the cylinder and flats, creating neps, broken fibers, and showing a general tendency to resist the action of the carding wire in attempting to straighten out and separate the individual fibers in the clump.

Any inspection, to be thorough enough to be worthwhile, requires removing the lickerin from the card, so that the screen and mote knives under the lickerin can be checked and set, and so that the wire of the lickerin can be examined closely. However, a good indication of the efficiency and action of this section of the card can be judged by analyzing the waste beneath the lickerin. This waste should be collected and analyzed as an excessive amount of good white fiber, small bunches of staple still attached to the seed, and too much short staple are all indications that the settings are wrong for the particular grade and staple length of stock being processed and that the teeth of the lickerin have been damaged.

The teeth of the lickerin must be in good condition if the card is to operate at maximum efficiency and produce high quality sliver. Lickerin wire is often found that is bent to one side, hooked, bent backwards, or with teeth broken off. Such wire will not only do bad carding, it will also be the source of many neps as the teeth will pluck cotton from the fringe and the hook or rough point will hold fibers. The held fibers will be bent back double over the surface of the lickerin and will be whipped around until they tangle, forming neps. Damage to the teeth is generally caused by hitting either the feed plate or the mote knives. Some mills set the mote knives very close to the lickerin to get more cleaning, and with such a tight setting it requires only a small amount of vibration to throw the knives into the path of the lickerin. The mote knives should not be set at an angle that the point of the lickerin wire will hang on the top edge of the knives. As long as the knife is not at or past this angle, and with the point of the lickerin wire missing the top edge of the knife by $\frac{1}{32}$nd of an inch, there will not be too much damage done if for some reason the lickerin and the knife are touched.

A few teeth of the lickerin knocked sideways, hooked, or bent, will not require reclothing but may be straightened by hand and smoothed down. If only a single strand of wire is damaged the points can be straightened up by using the point of a screw driver and then smoothed by using a knife-blade file, rubbing between the wire lines pulling the file between the points backwards and at the same time turning the lickerin backwards by hand. This must be done with the lickerin still in the card. However, if a large area of teeth is damaged then the entire wire of the lickerin should be replaced with new wire and built up to be the same diameter as a standard lickerin. A lickerin which is only slightly under size does not have to be discarded as it may be built up to the proper diameter, nine inches, by using special wire. Under size lickerins are used but they will not permit the card to attain maximum quality operation. The lickerin can and should be burnished but never smoothed down by using a block of abrasive. This practice can never be condoned for, although it may bring all of the teeth to a uniform height, the points of the teeth will be worn down and dulled past the point of service. A uniform height of lickerin teeth is necessary in order to make possible a correct setting to the feed plate and the cylinder, as the lickerin must be set to the highest teeth to prevent damage through interference. If there is a certain percentage of "wild" high teeth this means that the setting will not be correct for the greatest percentage of the surface of the lickerin.

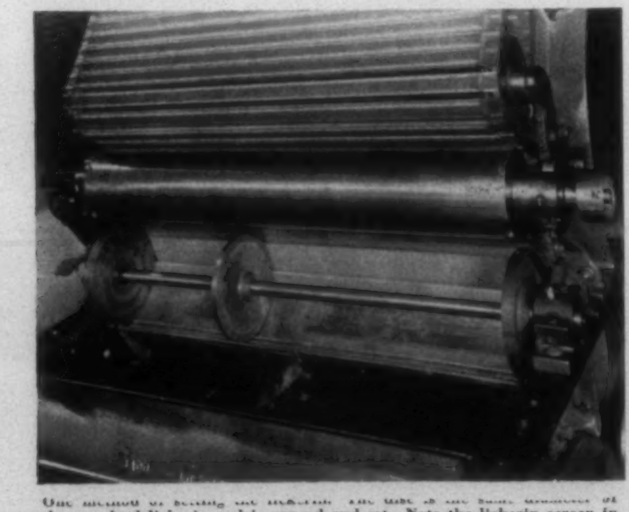
The lickerin must be in perfect balance and concentric so that it will not turn eccentrically on its bearings. Lickerins which are lopsided or with worn bearings will not operate satisfactorily, cannot comb the fringe of the stock even at the feed plate, and cannot be set correctly. Equal spacing between the card sides is essential, with the lickerin boxes against the lickerin journals to prevent any play or movement between the bearings. The oil ways and oil holes must be kept clean and clear at all times as impacted lint and waste will prevent lubrication of the bearings and hasten wear. Approximately 60 per cent of the wear of the card is caused through neglecting to keep these and similar oil channels clear.

There has been a considerable controversy with regard to the speed at which the lickerin should turn to obtain the best cleaning without damaging the fiber. As the teeth of the lickerin wire penetrate into the fringe of stock at the feed plate and feed roll there is a combing action which straightens the fibers to a certain extent before detaching them. The high velocity of the teeth also aids in removing heavy impurities and discharging them through the ribs of the lickerin screen. The lickerin also removes the fibers from the fringe and then deposits them on the wire of the cylinder. Both of these functions, cleaning and transferring fibers, are very definitely affected by the speed of the lickerin. If the speed is not great enough there will be a reduction in the cleaning at this point, while over-speeding will tend to break fibers and to chew up the larger waste particles, such as motes. Breaking these waste particles into small pieces is very serious for it's easier to remove large bits of waste whereas the smaller trash will probably be carried forward with the good stock.

If the speed of the lickerin is too high it will pick up more fiber than the cylinder can remove and in a short time will become loaded and a source of trouble. If the speed is too low insufficient cotton will be carried forward and the film of fiber on the cylinder will be irregular, causing thin places in the web and uneven sliver. The lickerin must be driven at a speed which will give thorough cleaning and sufficient detachment from the fringe to supply the cylinder without loading of the lickerin itself. Generally the speed of the lickerin will range from 425 to 475 r.p.m., using a standard lickerin nine inches in diameter. In the carding of long staple cotton and when a very low production is being obtained then the speed may be lowered somewhat. It is never recommended that the speed be in excess of 625 r.p.m., due to development of centrifugal forces and air currents which are difficult to control.

There are several settings concerning the lickerin: the distance from the lickerin to the cylinder, the feed plate to the lickerin, the lickerin screen, and the mote knives. All of these settings must be made accurately and in accordance with the local conditions under which the card is operating.

The first setting which should be made is that of the lickerin to the cylinder. The lickerin should be set to the cylinder before adjusting the cylinder screens to the cylinder. Often the lickerin will be set by a gauge without resetting the lickerin and cylinder screen afterwards. This is poor policy as this movement does change the position of the screen with the result that the cylinder screen may touch the cylinder wire, wearing holes in the screen at the lickerin and damaging the clothing. In setting the lickerin to the cylinder care must be taken to prevent letting the end of the gauge come in contact with the nose of the cylinder screen. This mistake is easy to make and will cause an inaccurate adjustment, particularly when the nose of the screen is old, out-of-line, and worn. This is also true when setting the feed plate to the lickerin as improper settings may be made due to contact of the end of the gauge with the top mote knife. Any interference of this sort will cause mistaken settings with resultant inferior carding being accomplished. Another small point that is a factor in the difference between proper carding and inferior work is the manner in which the setting is made, so as to assure a fixed setting without danger of creep. When the lickerin is set, the main bolts fastening down the lickerin should again be tightened securely. If these bolts are not loosened there will be a tension or strain set up which will tend to pull the assembly away from its true setting. This is particularly true when there is a lot of vibration present in the card room.



One method of setting the lickerin. [illegible] of the standard lickerin and is gauged and set. Note the lickerin screen in place.—*Photograph courtesy Saco-Lowell Shops.*

The setting of the lickerin from the cylinder will generally range from a minimum of .007 to a maximum of .010 of an inch, dependent upon the production of the card, and the condition of the stock processed. A setting of .007 usually will be more suitable than a wider setting, for the cotton tends to double back over the wires of the lickerin before reaching the cylinder surface if the setting is too great. The lickerin should be close enough to the cylinder to make an effective transfer of the fibers from the lickerin teeth to the wire of the cylinder. This effectiveness may be tested very practically by examining the lickerin after a short period of operation. If the lickerin is set correctly to suit the local conditions the lickerin teeth will be practically free of fibers as they enter the fringe of stock at the feed plate, showing that an effective transfer of stock is being made to the cylinder. Above all, the lickerin must be set perfectly parallel to the card cylinder, as any deviation from side to side will cause uneven coverage of the cylinder and the disruption of the air currents generated with the card.

The control of the air currents must be exercised in settings throughout the card by making careful, accurate, and even adjustments. The lickerin screen plays an important part in the control of air currents and should be set accordingly, true from one side of the card to the other and so that there are not any high or low spots which could form air pockets to collect stock and cause turbulent eddy currents.

The screen should be polished at intervals, if necessary, to keep the surface smooth so that there will be less possibility of stock collecting on it. The surface should also be cleaned periodically to remove any trace of oil or scum which might tend to collect fibers. The lickerin screen should be set close to the teeth of the lickerin so that the air current generated by the rotation of the lickerin will force the waste to pass completely through the ribs of the screen, dropping into the waste compartment where it cannot be drawn back into the good stock.

The lickerin screen is formed of two sections. The sec-

You can order them with confidence . . . use them with confidence. Every Ideal presser is guaranteed to give complete satisfaction. And for permanent, instant identification, each presser is stamped with the initials, "RCK."

Ideal pressers are made of the highest grade steel, molded and machined to standard specifications. Scientific weight distribution assures perfect balance under operating conditions . And you have your choice of the famous RCK glossy black and RCK bright finishes . . . both highly polished and extremely durable.

Sizes for flyers from 6x3 to 12x6

Delivery from stock—usually same day order received.

IDEAL MACHINE SHOPS, INC.

Phones 4161 and 4391

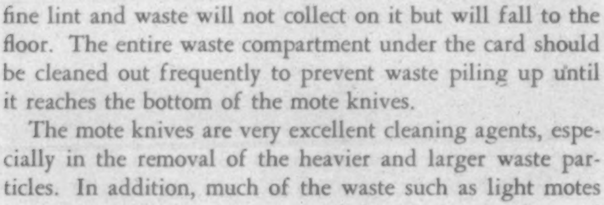
BESSEMER CITY, NORTH CAROLINA

25TH YEAR OF CONTINUOUS SERVICE TO TEXTILE MILLS

tion closest to the feed plate is composed of a frame and three waste bars, the other section being a smooth solid plate. The solid is secured to the cylinder screen and should be set with its lip close to the surface of the cylinder. This adjustment will vary from .028 to .034 of an inch. with the average setting being approximately .029. The bar section should be set so that the bars are from .010 to .022 from the lickerin, with the average setting about .012. This same setting is made by setting the edge of the bar section about one-eighth of an inch from the lickerin, and then either closing the distance to get less fly or opening it to obtain more, to suit the local conditions. The nose of the lickerin screen is set from .125 to .250, with a recommended setting in most instances being .1875. In general, the lickerin screens should be set as closely to the lickerin as possible, making sure that the setting is not so close that there will be any chance of contact between the two assemblies. When screens are set correctly and closely the waste will be composed of short dirty waste only, without the loss of good white fiber.

The lickerin casing should fit tightly to prevent blowing of stock and to aid in maintaining a smooth even air current. The draft plate under the card should be properly adjusted under the nose piece of the lickerin screen. This draft plate supports the lickerin screens and also prevents any air currents from blowing against the mote knives. The surface of the screen should be clean and smooth so that fine lint and waste will not collect on it but will fall to the floor. The entire waste compartment under the card should be cleaned out frequently to prevent waste piling up until it reaches the bottom of the mote knives.

The mote knives are very excellent cleaning agents, especially in the removal of the heavier and larger waste particles. In addition, much of the waste such as light motes and leaf which was not removed during the opening and picking will be taken from the good stock at this time, due to the fact the teeth of the lickerin has accomplished a more thorough separation of the individual fibers. There are two essential adjustments of the mote knives: the angle between the path of the lickerin teeth and the working surface of the mote knife, and the distance from the lickerin teeth. The angle may vary from 13 degrees to 30 degrees, dependent upon the operating conditions. The proper angle must be determined by tests at the mill, remembering that as the knives approach the horizontal the angle will increase and the percentage of waste extracted will be greater. In other words, the working surface of the knives come to a position perpindicular to the teeth of the lickerin, there will be a reduction in the amount of cleaning accomplished. As noted above, the knives must be set at all times so that the point of the lickerin teeth will not hang on the top edge of the knives. When the setting is made correctly there will be less damage done both to the knives and the lickerin wire in case the two are accidently brought in contact.



"I'm waiting for prices to come down."

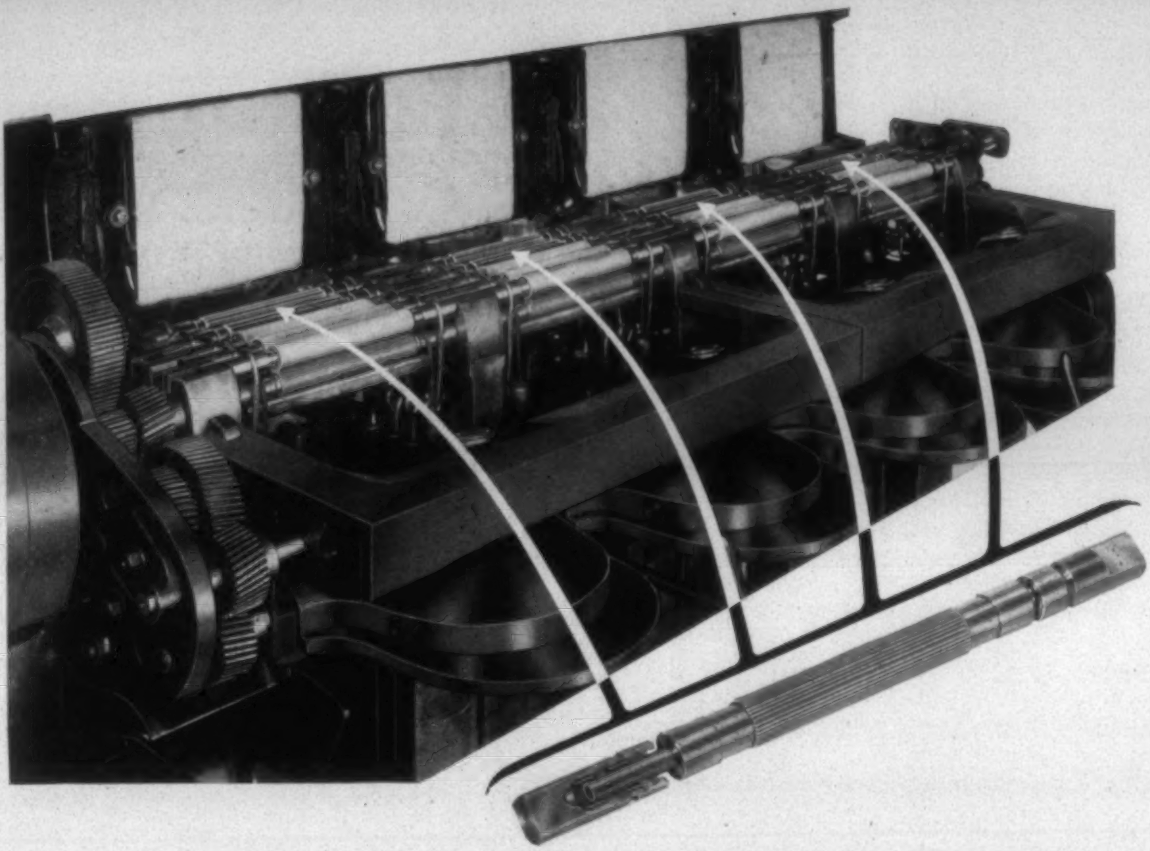
Many lickerins are damaged by setting the mote knives too closely. This is not advisable or necessary. Some mills will set the knives from .010 to .012 of an inch from the lickerin in order to obtain better cleaning although almost actually the same amount of waste removal will be accomplished by a setting of .017 and there is not the danger of damage to the card caused by the knives touching the lickerin, or the breakage of the knives due to chokes. Both of the knives can be set to the same gauge, .017, but it is the general practice to keep the top knife slightly more open than the bottom one. The reason for this is the top knife will remove the larger waste and will be operating on stock that is still in slightly larger clumps. In any case, when setting the top mote knife care must be taken in making the setting that a false adjustment is not made due to the end of the edge touching the bottom knife.

British Develop Air Gauging Of Vibration

Improvements in the quality of British textiles are likely to result from investigations recently carried out by Britain's National Physical Laboratory. A pneumatic method has been developed for measuring vibrations in the fibrous strands of textile materials before spinning, which will mean that yarn delivered to the looms for weaving is more uniform.

In textile manufacture, thick continuous strands of fiber are produced after treatment by the carding machine. These strands are then submitted to a series of reducing operations, during which they are known as slivers, slubbings, or rovings, and are finally spun into yarn. The ideal resultant product would be one in which the cross-sectional area, or the weight per unit length, was constant, but the natural tendency is for variations to occur because of the discontinuous nature of the fibers. Certain defects in cloths such as unevenness in texture and thickness are caused by these variations. Methods of continuously indicating and giving warnings of such variations during yarn production are, therefore, of great importance.

The air gauging apparatus devised by the N. P. L. for measuring textile slivers consists of a small chamber with two nozzles, one in line with the other in opposite walls of the chamber. A constriction in the pipe which connects the compressed air supply to this chamber regulates the flow of air. When a sliver is drawn through the two measuring nozzles, changes in the cross-sectional area of the sliver produce variations in the escape of air to the atmosphere. This varies the pressure of the air in the chamber and causes



The Amazing, Revolutionary RGM

DRAWING FRAME ROLL

DEVELOPED and PRODUCED by GOSSETT

Makes An Old Drawing Frame Better Than When New!

How can we make an old Drawing Frame better than when new? The photograph above shows how GOSSETT technicians changed this old frame from one with 4 rolls 6 ends up to one with 5 rolls 8 ends up. The first, second and third line rolls, top and bottom, are common rolls made by GOSSETT . . . the fourth and fifth line rolls are the amazing, newly developed RGM metalic rolls made by GOSSETT and which are so hard that even a steel file cannot cut them! The set-up is of graduated pitch flutes.

During the re-building process more things happened to the old Drawing Frame. The top rolls were equipped with GOSSETT roller bearing shells (there are none better) . . . so this old frame will now draft 8 to 11. Further, we installed new stands, new calender rolls, new tension train of spiral gears and studs, new drafting gears and studs and re-built the coilers, can tackles and installed new trumpets. Yes . . . it's an old Drawing Frame better now than when new. Takes know-how and equipment. GOSSETT has both PLUS the amazing and exclusive RGM metalic roll.

GOSSETT will also re-build Drawing Frames with the 4-roll system in the same manner.

Write for full particulars and estimated cost

More About the RGM METALIC DRAWING ROLL

The flutes and collars have been so hardened by the GOSSETT exclusive method that even a steel file will not cut them. The flutes on the RGM roll are so precision made that no tool marks can be found. The tolerance on the flutes, collars and neck is plus or minus .0005.

B. W. GOSSETT, PRESIDENT
E. C. MASON, SALES MGR.
H. A. HAYNES, SOUTHERN REP.

GOSSETT MACHINE WORKS, INC.
GASTONIA, NORTH CAROLINA

fluctuations in the readings of a manometer or other pressure-measuring instrument attached to the apparatus.

The apparatus is then calibrated with a suitable range of known samples having the same average qualities as the material to be measured. It is then possible to see whether the sliver being tested falls outside or inside the desired limits of tolerance for cross-sectional area (or weight per unit length).

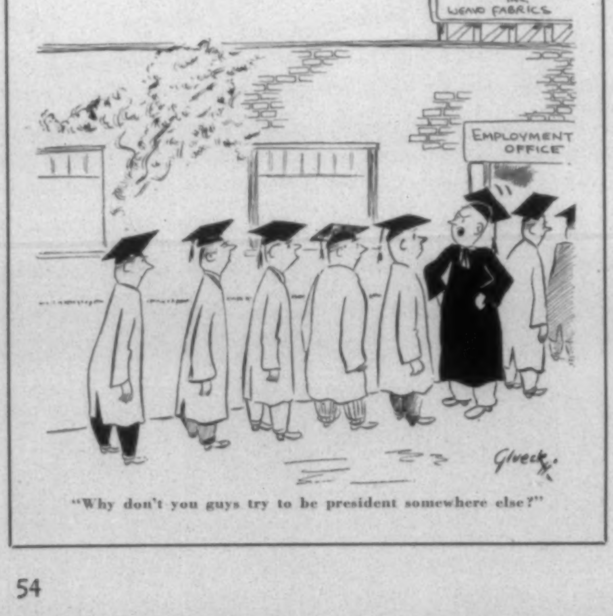
The pressure readings are obtained from the rise and fall of the water column in the manometer. Owing to the relatively high inertia of the water column, indications of sudden changes in a material moving quickly through the nozzles are liable to be missed. Because of this, the control mechanisms sections of the N. P. L. is developing methods of amplifying the small but rapid changes of pressure which occur during gauging. The aim is to produce equipment which will not only record but give automatic warning of undesirable changes in cross-sectional area of the slivers during actual production.

During the war the air gauging method was used in Britain for measuring simultaneously as many as six dimensions of cannon shells to half-thousandths of an inch, using comparatively unskilled workers as inspectors.

Wildt & Co. Announces New Pirn Winder

A new revised model of the Western pirn winder has been announced by the firm of Wildt & Co. In its original form, this machine was regarded as an outstanding example of British precision engineering skill in the textile field. The first British-designed and British-made automatic high speed pirn winder suitable for a wide range of yarn counts in rayon, silk, cotton, wool or linen, it was claimed able to increase output per operative by anything up to 400 per cent with a reduction of weaving costs. The new version known as the Wildt Western, goes many stages further, it is claimed. It incorporates all the modifications suggested by $2\frac{1}{2}$ years of practical experience.

The most radical development is an entirely new type builder motion, incorporating a hydraulic damping device. The latter is claimed to smooth out any tendency to irregular winding induced by an unbalanced pirn or uneven yarn. Other improvements embodied in the new model are: a higher rate of output with prolonged life, reinforced belt drive transmission, simplified package accommodation and yarn control equipment, accessible mechanism with controlled lubrication insuring a clean yarn, internal pressurizing equipment to repel ingress of fly or fluff, and substantially reduced prices. The machine is manufactured by Wildt & Co., Ltd., of Gillett Works, Great Bookham, Surrey, England.



"Why don't you guys try to be president somewhere else?"

New Synthetic Challenges Horsehair

According to *Industrial Bulletin,* a publication of Arthur D. Little, Inc., Cambridge, Mass., a new curled casein fiber is now being used where the resiliency of horsehair previously had been suitable. The new fiber, known as Caslen and used as a single filament a few thousandths of an inch thick, is cheaper than the best quality horsehair, equally resilient, and much more dependably uniform and available. The process was suggested by work of the Department of Agriculture, and was developed for these applications by Arthur D. Little, Inc., and the Rubberset Co., which is now producing Caslen.

Casein, obtained from skim milk, is one of the proteins, as are wool, horsehair, and human hair. When "regenerated" in fiber form it will take a permanent curl which gives a mass of fibers a springy quality. Curled Caslen is now used in a new automotive air filter by Fram Corp.; here the Caslen blended with wool filters dust from the air entering the carburetor. The filter unit can be used in old cars as well as new, and can be replaced more easily than the oil in conventional filters can be renewed. Mattress and furniture manufacturers are experimenting with Caslen as stuffing; in an uncurled form which is also available it may be blended into textiles to produce novel effects.

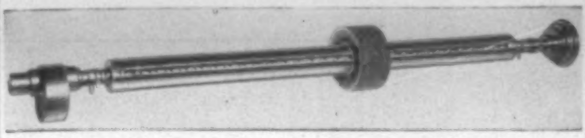
The horsehair which has been used primarily as stuffing comes chiefly from Argentina, where wild horses are rounded up each year and their manes and tails are cut. After the raw hair arrives in the United States, it is curled by a laborious hand process. A ropelike roving, about 80 feet long, is softened by steam, wound tightly, and then hung for about six months to set the "permanent wave." When it is torn apart, the intertwined hair makes a soft springy bat. The supply and quality of horsehair fluctuates, and there are indications that the supply is diminishing. About two and a half million pounds were imported in 1948 and sold at $1.25 to $1.40 a pound.

The curled casein monofilament is now selling for 94 cents a pound, but the price may decline as production increases and the price of dry casein drops. During the war, skim milk was used widely in dried form for human feeding. As foods become more abundant and cheap and surpluses become a problem, the casein market may help to stabilize farm income to some extent.

For the year 1947-48 the leading cotton producing counties in the United States were: Mississippi County, Ark., 291,286 bales; Kern County, Calif., 281,794 bales; Fresno County, Calif., 262,863 bales, according to Department of Agriculture records.

How you can lengthen the life of your Card Grinders

Our service engineers—card grinding specialists—are always at your service. They will go to your plant to work out your card grinding problems and check your machinery. They will give you constructive information on grinding bare cylinders or card wire.



B. S. ROY & SON COMPANY

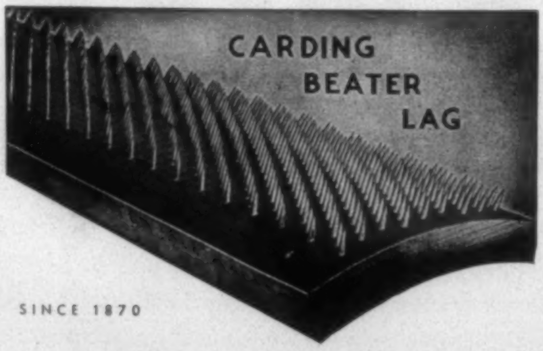
Established 1868

Worcester, Mass. — Charlotte, N. C.

Sales Engineers in the South:

Charles E. Hendrick—L. P. Bell—B. L. Quick
Office and plant, 1623 North Tryon Street, Route 29,
Charlotte, N. C.—Tel. 5-3845.

PINS and LAGS



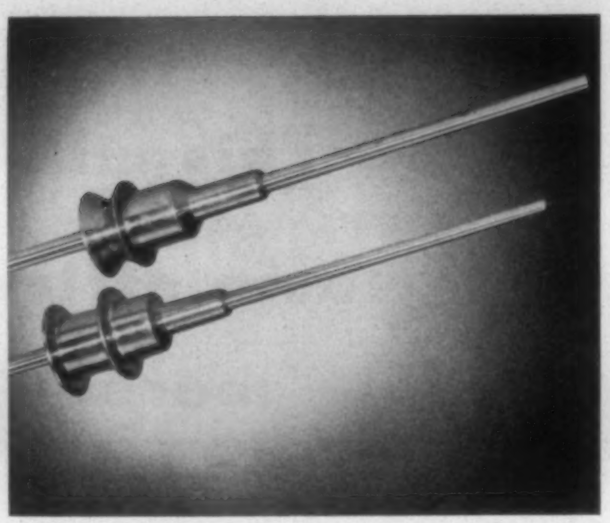
SINCE 1870

A BIG MODERN PLANT
PLUS 79 YEARS of EXPERIENCE

It means that you can speed your production by making use of all the knowledge we have gained on needle-pointed specialties for the preparation of wool and other fibers. In all the field—no plant like this—no such rich fund of experience—no such quality. Your inquiries will receive prompt attention.

■ ■ ■

WILLIAM CRABB & CO., 303 3rd Ave., Newark, N. J.



WHORLS

- Band and tape drive
- Precision made
- Made to specifications
- Guaranteed

SPINDLES

- Retopped by electric butt welding or tops built up with chrome and reground to size
- Pointed, polished, straightened — as good as new
- All spindles tested for straightness and accuracy at running speeds

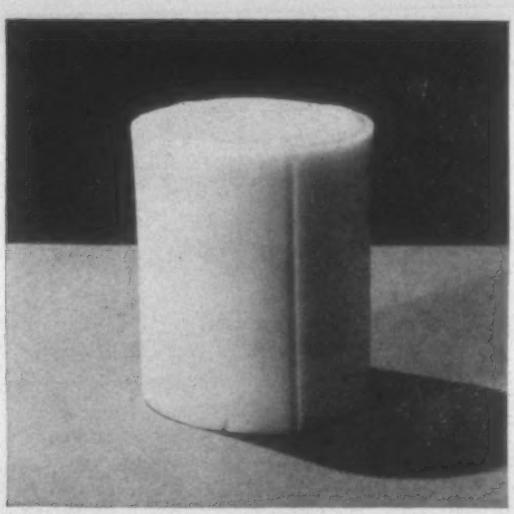
Investigate the advantages of Southern WHORLS and SPINDLE repairs. Write, wire or phone for full information.

Oldest Manufacturer of Flyer Pressers in the South—Est. 1900

Southern
SPINDLE & FLYER CO.
821 W. FIRST STREET
PHONE 2-1329 CHARLOTTE 1, N. C.

ONE OF 1017 PRODUCTS HOUGHTON BACKS WITH MONEY-SAVING KNOW-HO

This mill* stepped up loom efficiency 1½% ... merely by adding



HOUGHTO-WAX

to the size formula

This particular mill operating 1700 looms found that merely by a slight change in its size formula—substituting HOUGHTO-WAX for part of the softener formerly used—it had increased weave-room efficiency 1½%.

That meant more yardage and a lower weaving cost—the goal of every mill executive.

Houghto-Wax is a fatty wax which blends well with the sizing compound and the starch solution. It provides a sleek, smooth surface that aids in weaving by making the warp more strong and flexible with less shedding. It is furnished in pound blocks as shown above, for easy adding to the size solution.

May we demonstrate its value? For a discussion of this aid to better sizing and more efficient weaving, write E. F. HOUGHTON & CO., Philadelphia 33, or Box 2045, Charlotte, N. C.

*Full data on request

FOR "KNOW-HOW"... KNOW HOUGHTON!

(HOW-TON)

Warp Preparation & Weaving

SO YOU WANT GOOD CLOTH!

By FRANK D. HERRING

Part Six—Picking the Lease

AT the conclusion of Part Five we had covered the application of the size mixture and the drying of the warp yarn. The yarn is delivered from the drying cylinder in a solid mass sheet, cemented together by the size. The next procedure, preparatory to winding the yarn on the loom beam, is to secure a lease on the yarn. This is accomplished by placing lease strings between the sheets of yarn coming off the section beams, allowing these strings to pass over the drying cylinders to the front of the slasher, where they are replaced by lease rods, using the strings as a guide to put the rods in place.

The lease rod arrangement for an eight-beam set is shown in Fig. 14, Part Five. You will note that only seven rods are used to separate eight sheets of yarn. This is always true, one rod less than there are beams in the set, because the first, or large, rod separates the sheets of yarn from two beams. The small rods pick up the sheet of yarn from one beam each. However this method alone does not give a perfect lease on all the warp threads, because it does not separate each individual thread from all the other threads in the set. A perfect lease is necessary if high quality and efficiency is to be maintained in the weaving department. Each thread in the warp must be separated from all the other threads to prevent matting up and pulling back of the warp yarn at the drop wires.

There are two ways to get a lease on the yarn at the slashers that will separate each thread from all the others. One way is to put lease strings through the sheet of yarn before the beam is doffed off the warpers. This is done by using a large needle, metal or wood, with the lease strings attached. The needle is passed through the sheet of yarn, picking up one thread and skipping one for the full width of the yarn sheet. This of course, alternates the threads, one over and one under, the lease string. When the section beams reach the slasher these strings are used as guides for placing an additional set of lease rods through the sheet of yarn from each beam. The first set of lease rods, mentioned above, would separate each individual sheet of yarn from each section beam. The last mentioned set would separate each individual thread in each sheet of yarn. This method of course, would necessitate the using of 15 lease rods in an eight-beam set. A perfect lease can be secured in this way, but it requires considerable time, and some additional waste will be made.

Another way—which I very much prefer—to obtain a perfect lease is by using the lease picking rod holders, shown in Fig. 13, Part Five. These holders can be made by welding a strip of band iron, one-eighth by two inches, about 12 inches long, to a piece of round cold rolled three-fourths by six inches and drill the needed number of holes in the band iron; $\frac{5}{16}$ths or three-eighths-inch lease rods are large enough for this job. These small lease picking rods can be put through the sheet of yarn by using the regular lease rod strings, and after the lease is picked, these rods can be used to place the regular lease rods in running position. Then of course, the small rods are removed and layed aside for the next set. When the small lease picking rods are run between the sheets of yarn and placed in the holders, each sheet of yarn from each one of the section beams will be held apart, allowing the operator to pick one thread from different sheets of yarn, or one thread from different section beams, to be layed in the lease comb. This will give a lease whereby there will not be more than one thread from the same section beam in the same dent in the lease comb. This lease will separate every individual thread in the entire set, thereby giving a perfect lease.

When I speak of a perfect lease from the slashers, I am referring to the entire sheet of yarn coming off the slashers and being placed onto the loom beam with every individual thread being separated from all the other threads in the set, and the same number of threads placed in each dent in the lease comb. This kind of lease will lay the warp yarn down on the loom beam straight and smooth.

There should always be the same number of threads in each dent in the lease comb, otherwise there will be high and low places, or hard and soft places, in the yarn on the loom beam. This, of course, will lay the yarn onto the loom beam under varying tensions, and in most woven fabrics this will show by making a streak on the face of the cloth.

A crossed lease of the yarn coming off the loom beam, causing matting up and draw backs behind the drop wires on the loom, cannot be made on the slasher unless the operator, or someone else, moves threads from one dent in the lease comb and places them in another dent on a partly filled loom beam and fails to doff that beam before moving the threads. If this is done, and the beam not doffed off, the lease from the loom beam will be straight until the yarn is woven off to the place where the threads were moved in the comb, and from there on until the beam is run empty the lease will be crossed. A few freakish things can happen that will cause a few threads to be put onto the loom beam out of lease, but they happen so infrequently that I do not deem it worth while to mention them.

While the slasher is in operation, there will be occasional broken threads from the section beams, and also some threads broken at the large lease rod, where the mass sheet of yarn is torn apart; these broken threads will adhere to adjacent threads and be carried through the wrong dent in the lease comb. It then becomes necessary from time to time for the operator to straighten the lease by lifting these misplaced threads and putting them back in the proper dents in the lease comb. When the lease needs straightening, the lease strings should be run and the threads placed properly in the lease comb immediately after the loom beam has been doffed off the slasher. In other words, place the strings and run them over to the front, stop the slasher and put in the lease rods, remove the lease strings, doff the loom beam, put the slasher on slow speed and straighten the misplaced threads in the lease comb. This procedure will at least start the yarn going onto the loom beam with a straight lease.

Of course, break-outs occur at times when a number of threads will become broken and get out of lease before the loom beam is filled and ready to doff, and it becomes necessary to run the strings and straighten the lease and doff the loom beam off before it is filled. When this happens, the same procedure mentioned above should be followed.

Putting the Yarn on the Loom Beam

Like the warper beams, the yarn should be laid on the loom beams evenly and smoothly all the way across from beam head to beam head, void of high and low selvages, and high and low places between the selvages. The high and low selvages are caused by the loom beam heads, or the beam journals, being out of alignment, or the lease comb not being properly adjusted. The high and low places between the selvages are caused by a varying number of threads being run between the dents in the lease comb.

Another thing that should be watched very closely by the slasher operator is the tension on the sheet of yarn as it is delivered from the slasher and wound onto the loom beam. The yarn has been sized and dried at this point, and a strong tension will not injure it. Insufficient tension will cause the yarn on the loom beam to be soft and spongy, this will give an uneven tension on the individual warp threads at the point where they are interlaced with the filling yarn, resulting in a harsh raspy feel, and an uneven appearance on the face of the cloth.

Most slashers are equipped with a lever friction. This friction is a very good and simple device. It consists of one upright and one horizontal lever. Attached to the horizontal lever is an adjusting lever which contacts the upright lever. By means of weights attached to the horizontal lever pressure is exerted through the adjusting lever on to the upright lever. The upright lever contacts the outside friction plate which conveys the necessary pressure onto the friction disc. To increase the friction, and add tension to the sheet of yarn, the weights are moved out towards the end of the horizontal lever. In order to maintain a uniform tension on the yarn, throughout the process of filling the loom beam, these weights must be moved several times, and too often the slasher operator fails to do this, and low quality cloth is the result.

Shown in Fig. 15 is an attachment that is very easy to make and apply, and will render good service towards holding the same tension on the yarn as it is wound onto the loom beam. To make this attachment, fix a piece of band iron one-fourth by one inch, 12 inches long, to the square press roll shaft; this can be done with a U-bolt. Attach a piece of leather to the band iron. Drill a hole near the end of the horizontal lever, and attach a coil spring. (A starting rod spring used on Draper looms answers this purpose.) Punch several holes near the top end of leather strap for adjustment to obtain the desired tension. Very little tension is required when the yarn is first started winding onto the empty loom beam barrel, or drum, but more and more friction is required as the yarn fills the loom beam. The band iron, attached to the press roll shaft, will be pressed downward as the yarn builds up and fills the beam. Consequently the friction will be increased gradually until the loom beam is filled and ready to doff off. When this attachment is applied and adjusted, it requires practically no attention, it will eliminate the possibility of error, and do the job satisfactory, and automatically.

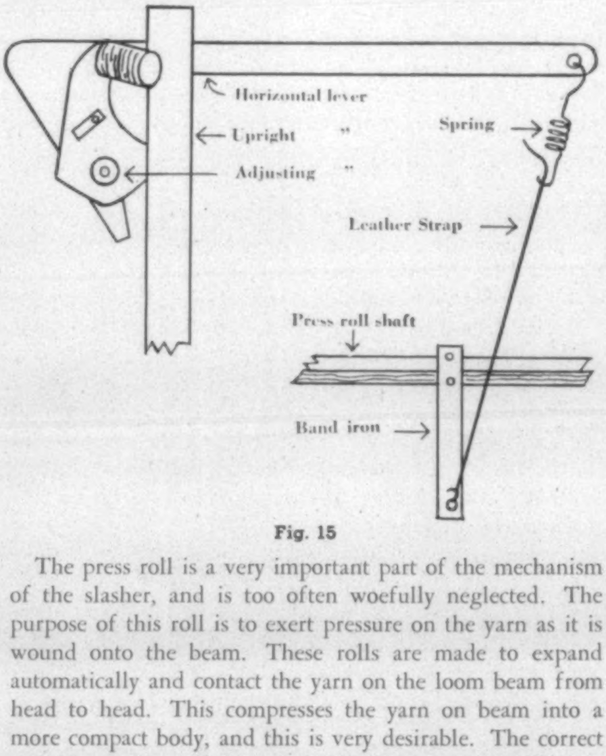
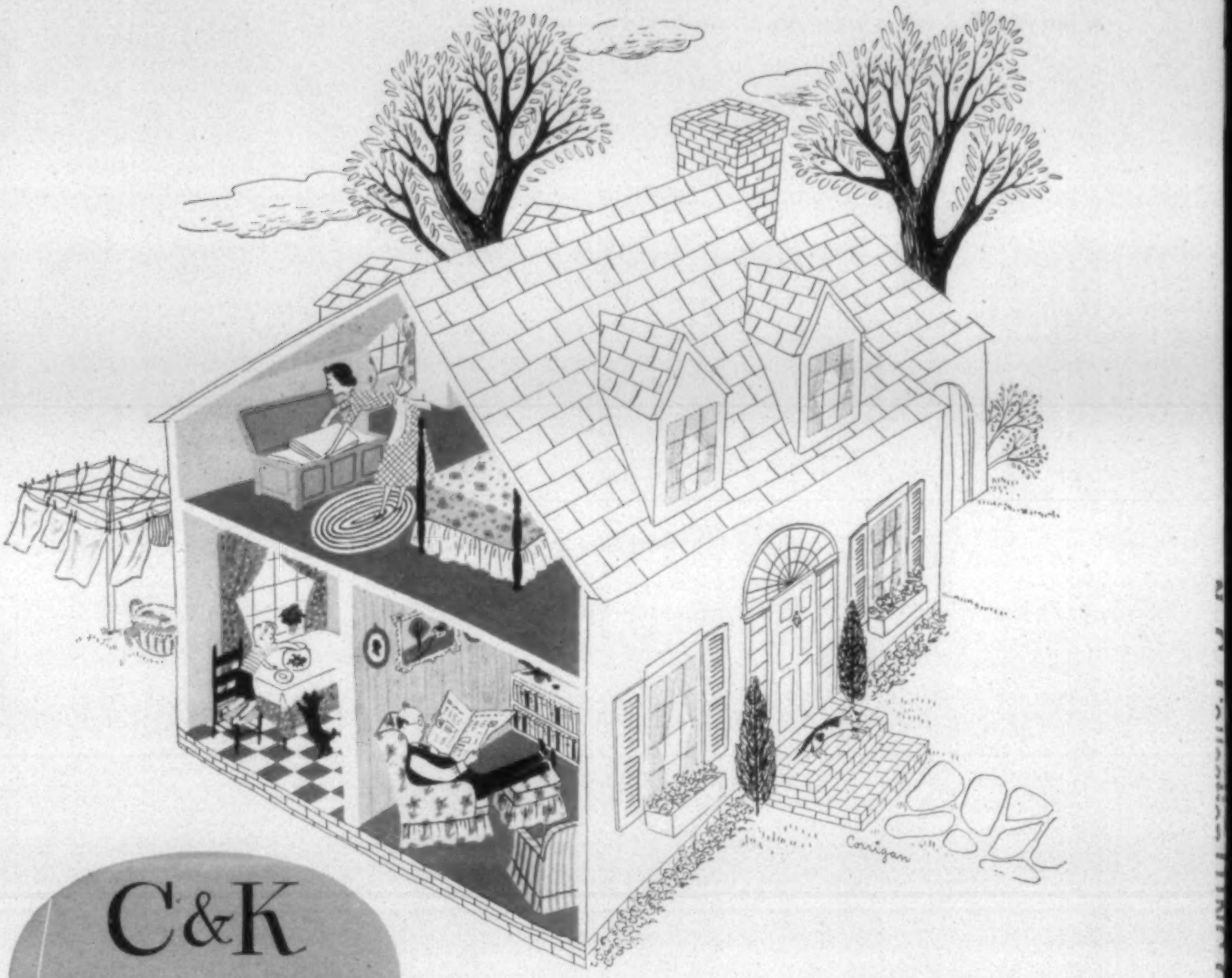


Fig. 15

The press roll is a very important part of the mechanism of the slasher, and is too often woefully neglected. The purpose of this roll is to exert pressure on the yarn as it is wound onto the beam. These rolls are made to expand automatically and contact the yarn on the loom beam from head to head. This compresses the yarn on beam into a more compact body, and this is very desirable. The correct running position of the press roll is on exact parallel line with the loom beam barrel, when the loom beam is in running position on the slasher. The press roll arms, which support the press roll, are adjustable. If the press roll is allowed to run higher on one end than the other, the yarn on the loom beam will be pressed more compactly on one end than the opposite end. When cloth is woven from a beam made in this manner it will be slack, or puckered, on one side. And this is one of the most objectionable types of defective cloth. This is one of the most prevalent sources from which this slack sided cloth comes, however, there are other places where it can be made. They will be covered later.

Doffing Loom Beam Off Slasher

If the lease is picked, and the yarn laid in the lease comb as herein prescribed, the sheet of yarn will be delivered, and



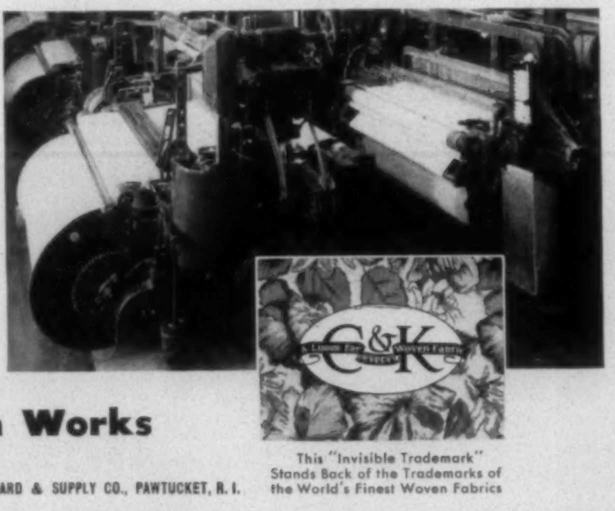
C&K C-LOOMS

put a heap o' livin' into a home!

THE UNEQUALLED VERSATILITY of the big C-Loom family has many bright witnesses in every room in every household . . . towels, blankets, bedspreads, curtains, and many other fabrics from the lightest hangings to the heaviest upholsteries.

C-Looms for these fabrics, regardless of fibre content, have the exclusive C & K feature of *3-way convertibility* to a 4 x 2 box automatic bobbin-changing loom for filling mixing (with "tricolor" feature) . . . from either a 4 x 1 automatic bobbin-changing loom or a 4 x 4 box non-automatic for pick-and pick work. And this basic versatility may be even further extended by the addition of a new high-speed C & K Jacquard in 2608-hook and lower capacities. No other looms can weave such a wide range of high-styled fancy fabrics.

C&K C-Looms are available with dobbies, head motions, and cams, as well as jacquards. Other advantages include all-purpose take-up, full automatic let-off, new feeler mechanism which stops a pick-and-pick loom before filling is exhausted, and a wide choice of shuttles accommodating bobbin sizes from $7\frac{3}{8}''$ to $10\frac{1}{8}''$, with wound diameter up to $1\frac{5}{8}''$. Write for the full facts on *all* these features of C&K C-Looms.



This "Invisible Trademark"
Stands Back of the Trademarks of
the World's Finest Woven Fabrics

Crompton & Knowles Loom Works

WORCESTER 1, MASSACHUSETTS

PHILADELPHIA, PA. · CHARLOTTE, N. C. · ALLENTOWN, PA. · CROMPTON & KNOWLES JACQUARD & SUPPLY CO., PAWTUCKET, R. I.

laid, onto the loom beam in a straight uniform sheet, each thread in its place and broken loose from the other threads. To have good running weaving, it is essential that each thread in this sheet of yarn be in place when the yarn is cut, and the loom beam doffed off. Some mills use a striking lease comb to hold the threads in place. This comb is tied to the loom beam and carried to the drawing-in department. A good lease can be obtained by this method if lease combs are provided with the correct number of dents per inch suitable for the light and heavy sheets of yarn.

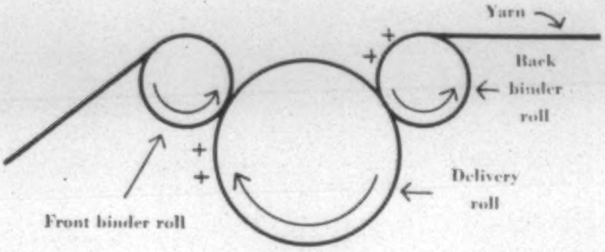
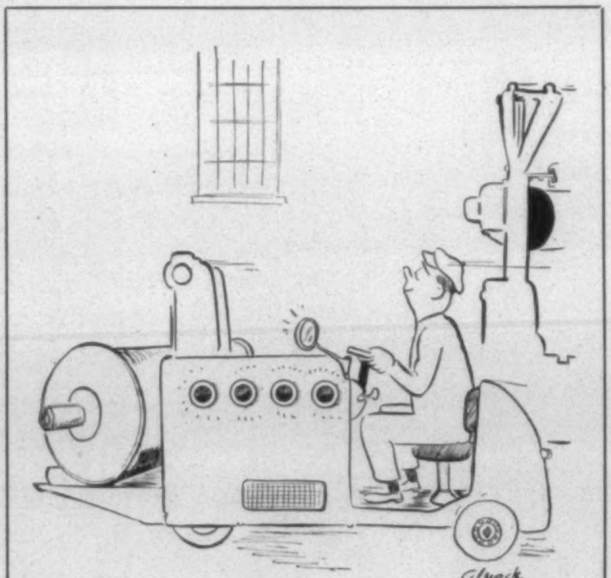


Fig. 16

The gummed paper tape is much better, provided it is applied properly. If applied to only one side of the sheet of yarn, some of the threads will fail to stick, and this causes the uniform lay, or lease, on the yarn to be lost, and this causes considerable waste in yarn in the tying and drawing-in departments. Shown in Fig. 16 indicated by "X" marks, is the correct way to apply the tapes so they will pass around the binder rolls, between the binder and press rolls, and be pressed and stuck securely to both sides of the sheet of yarn. The slasher should be stopped, and two strips of tape applied across the yarn at points indicated by "X" marks over the back binder roll. Then the slasher should be started on slow speed, and these tapes run around the delivery roll, to points indicated by "X" marks, stop the slasher and apply the other two tapes directly in line with the tapes already on the yarn. This will put two tapes on each side of the yarn sheet. They should be placed about one inch apart, and the yarn cut between them. The yarn should be slightly slackened before it is cut, and the loom beam doffed.



A Brief Review

I have finished with the slashing process, except I think it wise to review, very briefly, some of the most vital things which I have advocated. Many of these things are the regular orthodox ways of doing the job, some of them are a departure from the generally practiced procedures. I do not claim that they are all the best ways of getting the job done, but I do say that I have tried all of them, and found them to give me the best results on the job, from the standpoints of all around efficiency, quality, and economy.

Most weaving mills are called upon to make a wide variety of woven fabrics, consisting of fine and coarse yarn numbers, light and heavy sheets of yarn. Some of these fabrics will require a light, and some a heavy size regain. I have endeavored to present ways and methods of procedure that will meet these various requirements satisfactory without having to change the size formula. If I were called upon to set up a size formula, at any mill, I would proceed as follows. I would contact the proper official in the organization who could give me the desired requirements. I would then proceed to make tests on the slashers until I determined the two size formulas that gave the two extremes, light and heavy. I would then base the size formula on a medium between the two extremes. For instance, the light formula contained 110 pounds of starch, and finished 150 gallons, and the heavy formula contained 150 pounds of starch, and finished 150 gallons of size, I would establish my size formula on 130 pounds of starch, to finish 150 gallons. I would use about six per cent fats. I would be sure that the size formula contained the necessary amounts of preventative, and hygroscopic agents.

To obtain a light size regain, using 130 pounds of starch, I would run a low size level in the size box, and a heavy pressure on the squeeze rolls. For a heavy regain, using 130 pounds of starch, I would run a high size level in the box, and a light pressure on the squeeze rolls. By manipulating these two factors, size level in the box, and pressure on the squeeze rolls, a very wide range of results can be obtained.

In the next of this series of articles I will cover drawing and tying-in, and probably get started on weaving.

Non-Woven Cotton Fabric Market Surveyed

Non-woven cotton fabrics have numerous possibilities in markets where products require qualities superior to paper but which do not demand the high quality of woven or knit textiles, the National Cotton Council reports in a new survey of cotton's position in the non-woven fabrics industry. Currently the chief consumers of non-woven fabrics are disposable and decorative items. Although no accurate production statistics are available, manufacturers told council market analysts that napkins, towels, draperies, decorative items, casket linings, and plastic laminates are the largest outlets for non-woven goods today. Potential uses include a wide range of apparel, household, and industrial products. The report lists a large number of the present or potential uses for non-woven fabrics.

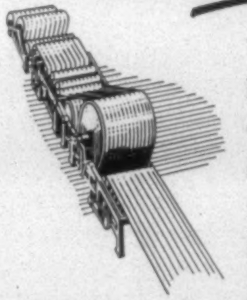
Non-woven fabrics offer cotton opportunities to compete

STALEY PRECISION-MADE STARCHES INSURE THESE THREE BENEFITS ...

① *Uniform* **SIZING**

② *Better* **WEAVABILITY**

③ *Improved* **FINISH**



Why not let Staley's highly skilled laboratory technicians recommend without extra cost to you, correct starches for ALL your sizing requirements? Staley's complete line of modified and unmodified Corn Starches—guarded for uniformity by rigid scientific controls—is acclaimed by leading textile manufacturers for consistent high quality and dependability. Let Staley work with you in eliminating forever your sizing problems, just as this company has cooperated with others for more than a quarter of a century. Write Today for more details!

Dependable Service from these Points—

ATLANTA, GA.
BOSTON, MASS.
CHICAGO, ILL.
COLUMBUS, GA.
DALLAS, TEXAS
DECATUR, ILL.
DURHAM, N. C.
GREENVILLE, S. C.
NEW YORK, N. Y.
PHILADELPHIA, PA.
SAN FRANCISCO, CAL.
SPARTANBURG, S. C.

Staley's
CORN AND SOY BEAN PRODUCTS

STALEY "ECLIPSE" MILL* AND PEARL **STARCHES**
*THIN BOILING

A. E. STALEY MFG. CO., DECATUR, ILL., U.S.A.

with paper and to develop entirely new markets in outlets on the borderline between paper and woven materials. In practically all uses, non-woven fabrics were described as being vastly superior to paper in appearance, absorption, strength, drape, smoothness, and launderability. They cannot, however, compare with woven or knit textiles in such qualities as launderability, resistance to abrasion, strength, appearance, uniformity, and drape. Cotton has advantages over other types of non-woven fabrics in characteristics such as softness, adhesive qualities, absorbency, durability, a minimum amount of fuzz and lint, whiteness, and consumer prestige. Moreover, cotton is attractive to manufacturers because fewer processing problems are encountered when cotton is used.

Opportunities for expanding cotton consumption in non-woven fabrics can be broadened through research on better bonding agents which would give greater strength and permit the use of shorter fibers. Research on luster, removal of foreign matter, mildew resistance, and harshness also would improve cotton's position in competition with other types of fibers and with paper.

Producers of non-woven fabrics face two major merchandising problems, the study shows. First, it is necessary to overcome the general consumer impression that non-woven products are more like paper than like cloth. Second, a strong consumer feeling that it is wasteful to use disposable items must be conquered. Still another merchandising problem is to eliminate the practice of stressing "cotton" in products which actually contain only a minor per cent of cotton fiber. This is of vital importance to manufacturers of non-woven cotton fabrics because such practices frequently injure cotton's quality reputation.

Future expansions of non-woven fabrics in competition with paper probably will be on the basis of quality because it is unlikely that the fabrics can compete with paper pricewise. On the other hand, non-woven fabrics must compete with woven and knit textiles on a price basis because they cannot equal the quality of woven and knit materials for most purposes. At the time the Cotton Council survey was made, non-woven fabrics cost several times as much as paper and often as much as woven or knit textiles. Industry members believe, however, that better machinery and the economies of volume production will permit significant price reductions in the future. When non-wovens can be manufactured from cotton waste obtained as a by-product of other operations within a company, cotton has a favorable price advantage over competing raw materials.

Thirteen producing companies make up the non-woven fabrics industry, but four more companies are contemplating entry into the field. Material for the report was obtained through personal interviews early this year with representatives of 30 organizations having a direct or indirect interest in the production of non-woven fabrics. Copies of the report are available from Market Research Department, National Cotton Council, Box 18, Memphis, Tenn.

Develop New Method For Building Tires

The development of a successful method for building tires of nylon cord without the use of restricting cross threads to space the cords has been announced by B. F. Goodrich Co., Akron, Ohio. Advantage of the method, company engineers state, is that it permits the cords to flex rythmically under the normal stresses and severe road shocks of driving. As a result, all cords are said to carry their full share of the load and impact, with an appreciable gain in tire mileage, safety and riding comfort.

The use of cross threads, or wefts, an almost universal practice in the tire industry, reduces the efficiency of the working cords, according to B. F. Goodrich engineers. Sole purpose of the cross threads, they state, is to bind the cords into a loose, net-like fabric, for ease of assembling in the tires. The threads carry no load themselves, B. F. Goodrich's engineers claim, and interfere with the action of the cords by impeding flexing. They are also said to cause bunching or gapping of the cords, and other irregularities, with the result that some are overworked while others are "slackers."

With the development of the new nylon process, B F. Goodrich becomes the only tire company producing "rythmic-flexing cords" in all three types of tire cord—nylon, rayon and cotton. But B. F. Goodrich spokesmen predict that all the major tire companies eventually will adopt the new principle because of its many advantages in manufacturing as well as in tire efficiency and uniformity. Chief obstacles are technical production problems and the vast investment required. Now that a rythmic-flexing cord process has been developed for all three types of cord, the way has been opened to important advances in tire performance, B. F. Goodrich asserts.

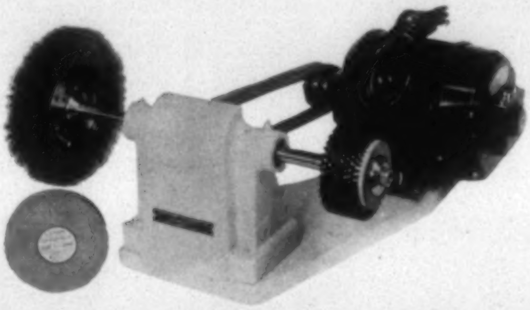
England's Largest Heavy Cotton Loom Shown

The largest heavy cotton loom ever made in England was recently demonstrated in the workshops of the Lancashire loom manufacturers, Wilson and Longbottom. From the drawing board to completion it took 2½ years. The loom is 20 feet wide and long, nine feet high, and weighs 20 tons. It is fed by 16,000 pounds of yarn at a time and will produce fabric ten times heavier than ordinary cotton looms in widths up to 12 feet. The loom's shuttle travels at a speed of 35 to 40 miles per hour.

Portable

REED BRUSHING MACHINE

Low Priced — Efficient



A machine designed and built especially for the cleaning of reeds but—

A low-priced portable machine which every mill should have.

It can be placed on any bench and attached to any light socket. In addition to being a valuable machine for brushing rust, lint and dirt from reeds, it can be used for many other brushing and cleaning operations. By using the Brightboy Wheel, temple marks can be removed; shuttle points, etc., can be polished up nicely—in fact, should you so desire, you can put on a regular grinding wheel for general grinding purposes.

SPECIFICATIONS

Motor: Westinghouse 1/3 H.P., 110/220 volts, 1725 R.P.M., Repulsion Induction single phase, sleeve bearing, equipped with Sentinel breaker snap switch and 12 feet of heavy extension cord.

Spindle equipped with bushings 15/16" diameter mounted in ball bearings, equipped with Alemite fittings. Spindle speed 1725 R.P.M.

Gilmer "V" Belts (2) Double Drive.
Space required only approximately 12"x20".
Shipping weight 68 pounds.

We carry stock of all
brushes and parts.

GREENSBORO LOOM REED COMPANY, INC.
GREENSBORO, NORTH CAROLINA

LAMBETH PRODUCTS
FOR SPINNING, TWISTING, SPOOLING, WEAVING

Basket weave spinning tape
weave spinning tape
Herringbone
"BILTRITE" CANVAS LUG STRAP
(PATENTED)
Basket weave twister & spooler tape
Double loop hook bands for cards, twisters, spoolers, etc. (all lengths and diameters)
Mule ropes all sizes diameters
Braided spindle banding for mules, etc.

LAMBETH ROPE CORPORATION
NEW BEDFORD, MASS., U. S. A.

ANNOUNCING A

NEW ALLEN BEAM

THE "G" LINE

FOR ALL MAKES OF WARPERS

3 types:

Cotton (GK), Rayon (GR), Nylon-Acetate (GN)

Important advances in design and construction.
Substantially increased strength.
New features to maintain truest running.

WRITE FOR DETAILS

ALLEN
COMPANY

General offices — 156 River Road
New Bedford, Mass.

Representatives in all Textile Localities
and all Principal Countries of the World.

NON-FLUID OIL

TRADE MARK REGISTERED

53 YEARS

OF DOING ONE JOB WELL . . .

For 53 years, NON-FLUID OIL has set the standard for all lubricants used for Special* applications in the operation of textile machinery. Universal use of NON-FLUID OIL has set a pace for the imitations which have served only to emphasize the importance of the use of this most effective lubricant.

Constantly—we are told by our customers about the superiority of NON-FLUID OIL over oils and grease-filled oils and mixtures. Occasionally we have brazen requests from lubricant vendors for samples of our material, and their admission that they want them for purpose of duplication.

53 years have gone by and there has never been a long-lived imitation of NON-FLUID OIL. We anticipate that 53 years more will expire with no change in this situation.

—Comb boxes, doffer, cylinder and lickerin bearings, all roll necks of carding and spinning, and for general application on all model and makes of looms.

NEW YORK & NEW JERSEY LUBRICANT CO.

292 Madison Avenue, New York, N. Y.

Southern District Manager: FALLS L. THOMASON, Charlotte, N. C.
WORKS: Newark, N. J.
WAREHOUSES: Atlanta, Ga.—Greenville, S. C.—Charlotte, N. C.—
Providence, R. I. — Chicago, Ill. — St. Louis, Mo. — Detroit, Mich.

NON-FLUID OIL is not the name of a general class of lubricants, but is a specific product of our manufacture. So-called grease imitations of NON-FLUID OIL often prove dangerous and costly to use.

Maintenance & Engineering

A Master Mechanic Tackles COSTS

By JAMES T. MEADOR

THIS is directed to *all* of you wherever there is a textile mill with an economy-minded management. Especially is the first part directed to those of you who are operating in South Carolina, since there has recently been enacted a state law affecting any industrial plant having a surrounding or enclosing fence, which, as you realize, concerns such plants as yours principally, inasmuch as practically no industry other than textile industry is so enclosed. This law requires that the operatives, or employees, of a plant must at all times while they are on duty have free access to the outside of the fence or enclosure by means of either an *open* gate, or by having a *watchman* on the gate to permit their exit.

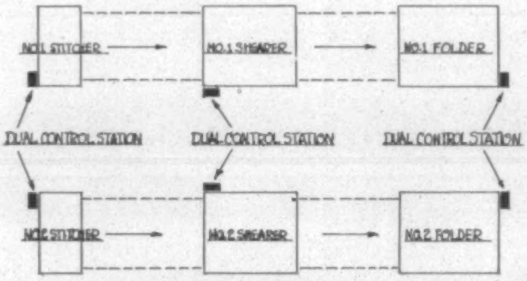
Well, we know of many mills where the gates are left open during the day, that is, where they can be under observance. But, at night, they are closed and locked, and one can only go through to the outside when the watchman shows up after making his rounds. This the new law says is not permissible because the person desiring an exit might have to await the watchman's arrival while there might be an emergency in his home, such as sickness, etc.

You know that you can't run the risk of leaving the gate open at night, so the other usual thing to do would require a watchman—*two* of them, each on a six-hour shift, or, maybe each on an eight-hour shift. This, then would mean that your yearly cost on both shifts of this job would be approximately $3,200 to $3,500, depending, of course, on what your rate is for this job classification. So, you will begin to look around to find some method or means of avoiding such an expense as this.

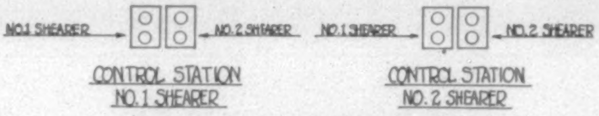
George Lewis, master mechanic of both plants of the Limestone Mfg. Co. at Gaffney, S. C., did just exactly that, and with very gratifying results. He designed and developed a one-way, non-reversing, fool-proof, ratchet type gate which he installed in his factory fence so that when anyone on the inside wants to get to the outside, he merely pushes the gate around as he would a turnstile and goes on out. But, if he decides that he wants to go back in he finds it impossible to do so. Likewise, any prowler or other unwelcome visitor would be discouraged. This gate has received not only the official approval of the inspector, but also his complimentary approval. Mr. Lewis will be glad to show it to any and all who are interested in such equipment.

Cloth Room Improvements

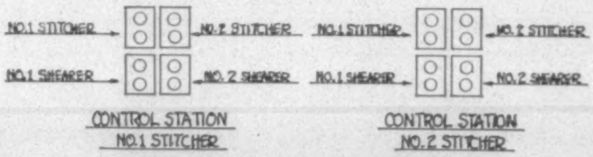
Mr. Lewis also has developed a few "wrinkles" in his cloth room that are destined to save his company approximately $6,200 to $6,500. The first of these concerns the arrangement and control of his stitchers, shearers and folders, which are arranged as shown in the accompanying sketches. The arrangement is based upon the fact that only one man is needed, on each shift, to take care of each end of this assembly, instead of two at each end, as has previously been the case. This arrangement, you will notice, is equipped with dual control stations on each unit of each assembly or combination of stitcher, shearer and folder, which provides finger-tip control of either machine from any of the other machines by means of push-button control stations in connection with combination type magnetic starters for the driving motors shown on the sketches. This,



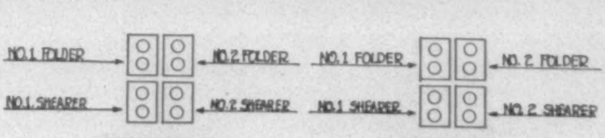
MACHINERY LAYOUT



SHEARER CONTROL ARRANGEMENT



STITCHER CONTROL ARRANGEMENT



FOLDER CONTROL ARRANGEMENT

then, gives the operators full control of the machines or processes directly under their observation, as follows:

Stitcher Operator: Both Stitchers
Both Shearers
Folder Operator: Both Shearers
Both Folders

This means that the stitcher operator can stop either stitcher or either shearer from his point or area of work at either one of the stitchers. Likewise, he can stop either shearer from his working area around the other shearer. By the same sort of control arrangement, the folder operator can stop either or both shearers or either or both folders from the other folder (all of this may sound complicated, but, that's the way it is, and it really is very simple when you get down to full consideration of this problem).

The magnetic starters are located on the machines adjacent to the motors. The control stations are mounted on a convenient spot nearest the usual position of the operator, and wired with rigid conduit and multi-colored control wire of Size 14, Type T. The accompanying sketches showing the dual control stations on both of the stitchers will give an idea of the arrangement of the control circuits. Also, from these sketches you will see the arrangement of the push-button stations for the control from either folder. You'll find the same thing for the stitchers, too. I neglected to mention that all of these are just standard "start-stop" push buttons.

G. E. Has Mill Modernization Program

What is believed to be the first comprehensive visual program devoted exclusively to a review of major modernization trends in the textile industry has been announced by General Electric Co. Thirteenth in the company's "More Power to America" series, the new textile mill modernization program is designed to show how textile mills can increase productivity, improve product quality, and reduce costs through increased use of modern equipment and processes.

Expected to be a significant contribution of the study of textile techniques, the program consists of a 16-mm., sound-color motion picture, "Textiles Unlimited," and a 104-page, semi-technical manual dealing with modernization trends in the industry. The program will be distributed in September to G. E. district offices throughout the country for showings to interested textile mill executives, engineers and superintendents; textile machinery manufacturers; and to personnel and associations allied with the industry.

"Textiles Unlimited" is a product of more than two years' research and reporting. Production of the film took cameramen and engineers through textile mills and laboratories from Maine to Alabama. The movie, which runs about 26 minutes, was produced under the technical supervision of the G. E. visual education divisions and textile industries division in co-operation with leading textile mills and machinery manufacturers.

The film shows for the first time on the screen many new equipments and processes under development in laboratories, pilot plants, and mills throughout the East. In an interesting series of sequences, it illustrates the important role electric equipment is playing in the industry's program to produce highest quality textiles at the lowest possible unit cost.

"Mill conditioning"—the installation and use of modern lighting, air conditioning, materials handling, and power distribution equipment—is shown as one of the major trends in the industry today as progressive mills strive for better working conditions, more efficient production, less down time and waste, and better quality. Applying motors at the direct point of power use is depicted as important to gain the advantages of efficient machine design and performance, added safety and flexibility, better arrangement and saving of space.

The film also shows that higher controlled speeds are possible through the use of automatic "electronic brain" controls and, that finer quality control can be attained through utilization of such modern devices as the spectrophotometer, the weft-straightener, and stroboscopic lights for inspection of cloth. Growing use of infra-red lamps and dielectric heating equipment in the industry is cited as another important trend. The growing importance of continuous processing, the use of two or more machines electrically co-ordinated to function as one unit, is illustrated by the film as still another significant way of minimizing production costs and improving quality.

The illustrated manual, GEA-4998, "How Textile Mills Are Modernizing" (price $1.25), is a report to the industry on general trends and specific new methods and equipment. Prepared by G. E. in co-operation with textile machinery manufacturers, textile research organizations, trade journals, and textile mills, it covers in great detail the major trends illustrated by the film. These include: comprehensive mill conditioning, modern materials handling, applying power at the point of use, higher average speeds, finer quality control, continuous processing, new electric tools and new processing methods.

Bahnson To Repeat Air Conditioning School

Because the idea was so well received a year ago, the Bahnson Co. of Winston-Salem, N. C., will again conduct two one-week terms of classes for maintenance engineers on industrial air conditioning—starting Oct. 10 and Oct. 17. The courses will duplicate each other to permit organizations to send all their engineers and maintenance men without disrupting their operating organization. The object of the courses is to offer to maintenance men the latest and correct information on the maintaining of the air conditioning equipment in their charge, at peak efficiency.

Classes will run for five days each week starting at 9 a. m. and will include trips to an apparatus room, to the plant of R. J. Reynolds Tobacco Co., and to the Bahnson Co. Lectures to be presented in class cover a range of pertinent subjects from the history of air conditioning through automatic controls, motors, heating, humidification, refrigeration, pumps and fans to insulation. Each subject will be presented by experts from leading industrial suppliers such as Minneapolis-Honeywell, Brown Instrument, Worthington, Westinghouse, Ingersoll-Rand, American Blower, Raytheon and the Bahnson Co. "Graduates" will be given a banquet at the final session of each week.

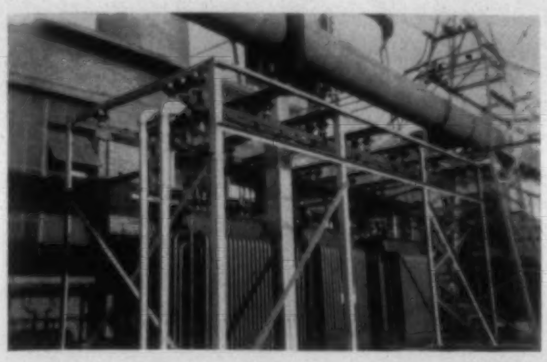


Photo showing a completely shielded substation, 2400/600 volts furnished for the Rock Hill Printing and Finishing Co., Rock Hill, S. C.

☆

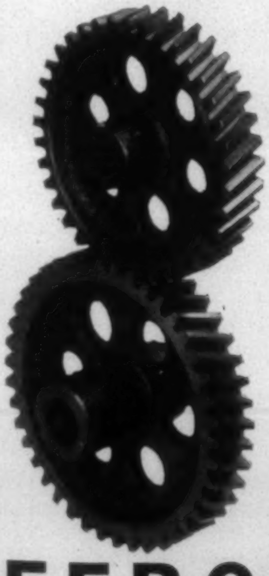
W. H. Smith, Jr., Jimmy Rhyne, Jack Bassent

Southern Electric Service Co.

Charlotte • Greensboro • Spartanburg • Greenville

Custom Cut

GEARS



SILENT CHAIN DRIVES

•

ROLLER CHAIN DRIVES

•

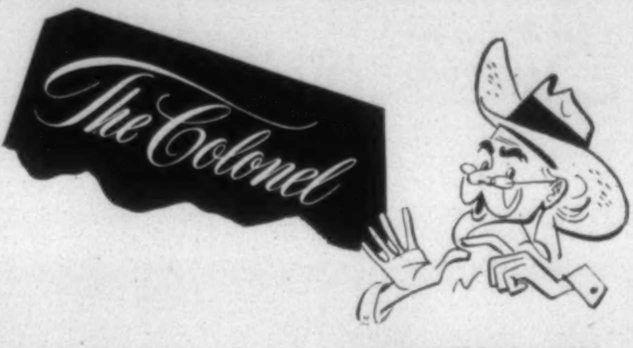
VEE CORD DRIVES

•

SPROCKETS
SHEAVES
COMPOUNDS

FERGUSON GEAR COMPANY

GASTONIA, NORTH CAROLINA



means this to you!

No waste

The Colonel uses no oil . . . it is alemite lubricated . . . therefore waste from oily selvages is practically eliminated.

The Colonel has all bearings sealed in to insure smooth even operation.

greater efficiency

The Colonel has a long comb stroke which permits lower running speed in handling the web. This impsoves the operating efficiency in the card room and eliminates costly shut downs of the cards.

and

The Colonel is adaptable . . . it can be used for either left or right hand cards and is made for all standard woolen and cotton cards.

STANDARD REPLACEMENT UNITS

the Colonel Comb box is your best insurance against costly shut downs . . . bearings and replacement parts are available at your nearest mill supply house.

Scientifically engineered by a practical mill man the Colonel comb box embodies features which will definitely improve the quality of production from your card.

the all ball bearing oil-less comb box

Write, wire or call us today about your comb box problems.

ODOM

Machine Manufacturing Corp.

Roswell, Georgia

Harry Haynes, Box No. 1724, Chattanooga, Tenn. • Jack Craven, Troy, N. C. • Robert B. Rowland Co., Box 1313, Greenville, S. C. • O. T. Daniels, Textile Supply Co., Dallas, Texas • Export Agent, Ben Comer Machinery Co., 308 Ivy Street, Atlanta, Georgia • Foreign Representative: Mr. M. T. Meadows, M. T. Meadows y Cia., Sarmieto 452 Buenos Aires, Argentina.

Smooth warps for easy weaving

with *Laurel* RAYON SIZE*

Your rayon warps will be smoother, stronger, cleaner, more resilient and more resistant to atmospheric action if you use Laurel Rayon Size. Unlike ordinary sizes, Laurel Rayon Size penetrates and envelops the yarn—binds the filaments together. It reduces chafing and breakage, increases elasticity, equalizes variations in yarn tension. Does not shed. Removed quickly and easily in regular scour. Laurel Rayon Size gives high loom efficiency. Leaves cloth soft, smooth with good appearance and with minimum defects.

Sizers and weavers throughout the industry tell us Laurel Rayon Size simplifies and speeds the weaving process. If you are not now using Laurel Rayon Size, save time and costs by sending for a trial order today. Available for immediate delivery. Our Laboratory Technicians will gladly recommend a formula that will meet your exact requirements.

SOAPS • OILS • FINISHES

Laurel **SOAP MANUFACTURING CO • INC •**

Wm. H. Bertolet's Sons • *Established 1909*
Tioga, Thompson & Almond Sts., Philadelphia 34, Pa.
WAREHOUSES: PATERSON, N. J. • CHATTANOOGA, TENN. • CHARLOTTE, N. C.

Whichever way you look at it...

TRADE MARK REG. U.S. PAT. OFF.

Convenient sales offices—ample local stocks the nation over

Specialized technical service

Long experience ...accumulated knowledge

Quick delivery and shipping service

Strategically located plant

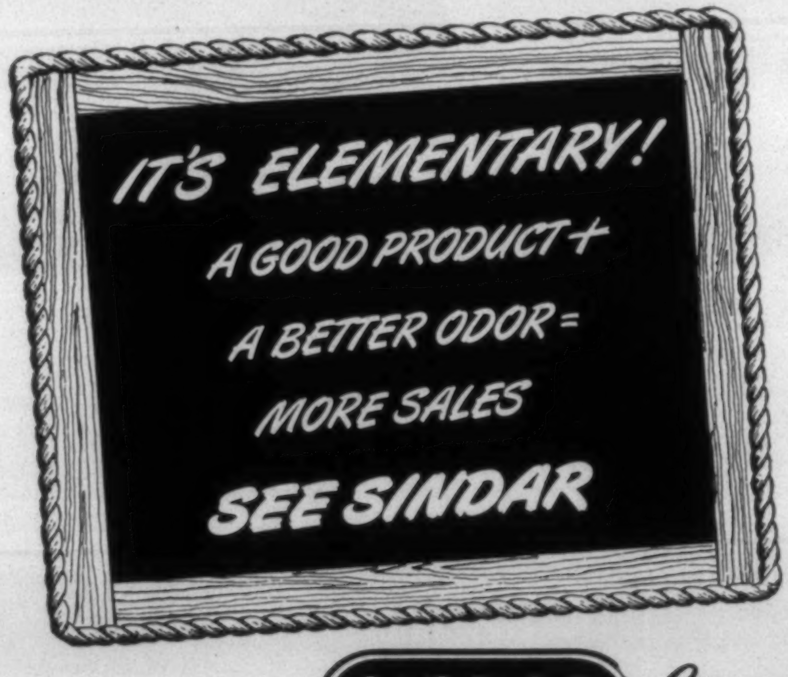
It pays to specify **SOLVAY**

TRADE MARK REG. U.S. PAT. OFF.

With today's cost of manufacturing so high, it's the wise chemical buyer who considers his purchases from every angle. Price and specification alone are no longer basis enough for a buying decision. There is a good deal more a buyer can expect—speed of delivery, technical service, big-plant capacity to assure continued supply, knowledge of the industry and experience with its problems. On all these counts, more and more manufacturers agree, "it pays to specify Solvay."

SOLVAY SALES DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.

Soda Ash • Caustic Soda • Caustic Potash • Chlorine • Potassium Carbonate • Calcium Chloride • Nytron • Sodium Bicarbonate • Specialty Cleansers • Ammonium Bicarbonate • Sodium Nitrite • Para-dichlorobenzene • Ortho-dichlorobenzene • Monochlorobenzene • Methanol • Ammonium Chloride • Formaldehyde



SINDAR *Corporation*
Industrial Aromatics and Chemicals

330 West 42nd Street • New York 18, N. Y.

Branches: Philadelphia, Boston, Cincinnati, Detroit, Chicago, Seattle, Los Angeles, Montreal, Toronto

Bleaching, Dyeing & Finishing

The Cost Factor In Bleaching

By IRVING TEPLITZ

SOME persons in the trade believe that processing information, particularly with an analysis and breakdown of costs, is something which should be kept secret and never disclosed to employees, much less interested competitors. However, superior football teams which are thoroughly scouted are defeated by lesser teams, so that execution and available material plays a more important part than mere knowledge of how things work. A plant with 10,000 pounds of cotton to be bleached each week cannot contemplate an installation of a continuous peroxide range which needs about three hours to handle that poundage, and the interest of the management in such a range does not pass the curiosity stage. Even competitors doing cotton bleaching in dye becks are faced with the horns of a well-known textile dilemma—to sacrifice quality production for lower production costs, or to sacrifice low costs for quality production. Above all production and processing costs is the factor of overhead, which is particularly significant when the poundage production is less than capacity and a sales job must be done in order to maintain production at capacity of the given facilities. Information is always pertinent and is no give-away of secrets because even assuming an advantage is given to the other fellow, there are many factors beyond his control which determine the costs of his production. The general progress of the American textile industry moreover is due to the wide distribution of textile knowledge and information.

White constitutes the greatest part of the color of cotton fabrics, although it is not particularly significant in the merchandising of synthetic and animal fiber fabrics. The cost factors governing the production of bleach white cotton fabrics is therefore of economic importance and has the highest development in the field of machinery and methods of bleaching; any discussion of bleaching is largely one regarding the cotton fiber, with minor attention given to the other textile fibers.

Cotton bleaching is divided into two processing operations: the boil or scour, and the actual bleaching process. The boil or scour is necessary to remove all foreign matter from the cotton so as to render it as pure a form of cellulose as is possible, and consists of a caustic soda treatment in boiling water. Formerly, the practice was to have a two-part boil, one of milk of lime (calcium hydroxide) followed by one of soda ash (sodium carbonate). The two part boil takes twice the time of the caustic soda boil hence is costlier, yet has the advantage of making the cotton a more permanent white. It is to be noted that lime and soda ash are two ingredients which react to form caustic soda (sodium hydroxide). The caustic soda boil is said to give a white last about a year. As a sales promotion idea, the lime-soda white could be advertised as the longer lasting white, which might have consumer appeal, and further might appeal to retail merchants during periods of slow turnover of stock. For heavy cotton goods where it is difficult to get good penetration on one boil, a double caustic soda boil is given; perhaps in such cases the soda-lime boil would serve just as well.

Chlorine and peroxide are the common cotton bleaches, though there are a number of other bleaching agents. In a check on the practices of a representative mill group, it was found that 43 per cent bleach with chlorine, 36 per cent bleach with a combination of chlorine and peroxide and 20 per cent bleach with peroxide. Chlorine is used in liquid form as a solution of sodium hypochlorite with about 15 per cent available chlorine. Peroxide is used in liquid form as a solution of hydrogen peroxide, commonly as 100 volume which has 27.5 per cent active ingredient. Peroxide is also available as sodium peroxide and sodium perborate when these solids are put in water; there are equipment and other reasons governing the use of these chemicals, the principal one being the interrelation of cost of material. Chlorine or hydrogen peroxide is used in the kier bleach; hydrogen peroxide and some sodium peroxide is used in the continuous bleaching range; and the combination peroxide-chlorine bleach is used generally in dye beck bleaching. Chlorine is less expensive than peroxide as a bleaching agent and the results are about equal. The kier method of bleaching seems to produce a slightly better quality of white, while the continuous bleaching method has the lowest unit cost. The bleaching of cotton in the dye beck is the most expensive and least satisfactory of the methods used. Hydrogen peroxide is used for bleaching goods containing some colored yarn.

Careful Handling Necessary

Liquid chlorine as a bleaching agent must be handled with care and caution as it can easily get out of control and injure the cotton fabric. In one extreme case, of carelessness, the chlorine bleach rendered the cotton fabric into many pieces of cotton fabric and cotton fiber, being totally without value. Sodium hypochlorite solutions can be controlled on the alkaline side of the bath, and is difficult to control when the bath is acidic. As bleaching takes place, the sodium hypochlorite solution becomes acidic due to the formation of an acid, and it is this factor which must be controlled after the initial check as to the alkalinity of the bath is made. Chlorine in an acid bath is likely to tender the cloth and cause the formation of oxycellulose which is undesirable in bleaching and which shows up as lighter colored material if the goods are dyed into a color. Hydrogen peroxide has little bleaching action in an acid solution so it must be used in alkaline baths. As sodium silicate or silicate of soda is used along with hydrogen peroxide, the pH of the bleaching bath is alkaline. Silicate of soda acts as a restrainer or governor and permits the controlled evolution of oxygen from the hydrogen peroxide. The presence of traces of the iron or copper in the cotton being bleached with hydrogen peroxide will lead to the formation of oxycellulose and a marked tendering of the goods. Goods with rust spots should have a pre-treatment with oxalic acid, while the phosphate class of salts are used to sequester particles of metals in the bath. Iron kiers are given a coating with silicate of soda so as to eliminate this as a source of iron in the bath, and of course, the use of stainless steel as a material of construction of bleaching machines is to be recommended.

Other Bleaching Agents

Sodium peroxide is used in dye beck bleaching principally and is useful in taking care of the cotton motes in a full or half bleach. For example, in a rayon-cotton cloth, sodium peroxide would be used as the bleaching material. Sodium perborate is also used in dye beck bleaching but has to be handled with great caution.

Potassium permanganate is a less common bleaching agent. It produces a brilliant and lasting white on cotton; however, it is an expensive material and its use is involved. It bleaches nylon and hence is important in this respect as the other materials do not bleach nylon. It cannot be used on acetate as it yellows the fiber. Permanganate is used cold, and in the presence of sulfuric acid it gives up oxygen and forms an alkali hydrate which is brown in color and must be removed by washing with acid.

Chlorine and peroxide are used to bleach viscose and acetate rayon. Chlorine is not used to bleach wool or silk as it attacks these fibers and degrades them. Chlorine whitens wool but its use in wool processing is in making it shrink-resistant. Hydrogen peroxide is used in bleaching wool, silk, or casein fiber.

Sodium chlorite has bleaching powers and as it is stable is used where hypochlorite might tender the goods, particularly in acid solutions. It is not used in kier bleaching and does not work well in an alkaline bath unless used in conjunction with chlorine or hydrogen peroxide. It may be used in conjunction with hydrogen peroxide so as to lessen the cost if only hydrogen peroxide was used.

Ozone is used in Europe for bleaching; however, special equipment is needed for the manufacture of this material. Ozone is made by electricity and might prove to be an inexpensive bleaching agent, particularly in areas where electricity is cheap.

The amount of chemicals used for bleaching cotton equals about five to 15 per cent by weight of the cloth. In a plant handling 300,000 pounds a week, the transportation and handling costs of the chemicals used is considerable. Furthermore, it is possible to buy less expensive materials and manufacture bleaching chemicals on the plant site. Usually, the waste liquors from the mercerization process are filtered and passed through a dialyser in order to reclaim caustic soda. The savings in purchasing hydrogen peroxide in tank cars amounts to about 20 per cent. The transportation and handling costs of 73 per cent caustic soda over the lesser concentrations are substantial where bulk is purchased. The large bleachery therefore has a competitive advantage over the smaller plant which cannot avail itself of these factors which reduce the cost of chemicals.

Lime and soda ash can be utilized to make caustic soda; lime may be used in the manufacture of lime bleach liquor, which is made by combining liquid chlorine with milk of lime. Lime bleach liquor is also made with the use of bleaching powder, also known as chlorinated lime or calcium chlorohypochlorite which forms calcium hypochlorite when placed in water. The addition of soda ash to this solution produces sodium hypochlorite. Soda bleach liquor is made by bubbling chlorine gas in a solution of caustic soda, caustic soda and soda ash, or soda ash. It may be noted here that solutions of sodium hypochlorite should be made and used when fresh, another advantage to plant manufacture. Sodium hypochlorite solution of 15 per cent available chlorine loses half its available chlorine upon standing 100 days at room temperature.

Purchasing in Quantity

The small bleaching plant purchases a few drums of caustic soda and carboys of liquid chlorine already prepared, while the large plant is in a position to effect substantial savings in the cost of materials, which may amount to a lowering of the over-all cost of bleaching to ten per cent or more. Sodium hypochlorite solution is usually used in a strength of 15 per cent available chlorine which amounts to 12.4 per cent by weight. As the solution loses chlorine on standing, it should be tested for strength before use, and an adjustment in the amount of solution can be made so that the cloth may be properly bleached.

If chlorine is present in a cloth, it tenders the cloth and yellows the white, hence excess chlorine must be removed or neutralized by means of an anti-chlor. Sodium bisulphite is the common anti-color and is used as a rinse after the chlorine bleach. During the rinse, a test is made to ascertain the presence of chlorine by use of starch iodide. One authority believes that sodium salts causes yellowing of cotton, hence prefers sulfurous acid as the anti-color (thus the approval of the lime-soda boil; soda ash is not considered to be a strong sodium salt). Sulfur dioxide gas is bubbled in water and is used as sulfurous acid. Other anti-chlors are hydrochloric or muriatic acid, sulfuric acid, formic acid, sodium hyposulfite and sodium hydrosulphite. The strong acid anti-chlors must be further neutralized with sodium bicarbonate after use as an anti-chlor, hence a disadvantage in use of acids.

The kier is an enclosed tank which holds the cotton cloth as the bath is circulated through the goods by means of gravity and a return pump. As the presence of air causes the formation of oxycellulose, all air is removed before the kier is operated at boiling temperatures. The cotton goods are placed in the kier by an automatic piler which lays the goods in position so that it can receive the liquid treatment in a uniform manner. In a four-ton kier, the bath travels at the rate of 300 gallons a minute; the ratio of goods is 60 gallons to 100 pounds of goods. The pump is operated by a five-horsepower electric motor. For the volume of goods held, the kier takes less space than any other bleaching equipment, though washers are needed as auxiliary to processing.

Procedure for kier bleach: Wet out goods. Boil eight to ten hours in 3.5 per cent caustic soda by weight of goods. Wash to remove excess caustic soda and foreign matter.

Bleach with sodium hypochlorite solution two pounds per 1,000 pounds of goods. Wash and anti-chlor with 0.1 per cent sodium bisulfite. Rinse. Peroxide bleaching consists of two to three per cent hydrogen peroxide with about same quantity of silicate of soda.

Hydrogen peroxide cannot be given a pressure boil, for oxycellulose will be formed. The caustic boil may or may not be under pressure; the pressure boil takes less time. Soda ash, sodium silicate, sodiumtetra pyrophosphate, detergent or soap may be used in the caustic soda boil as this boil is one to remove the foreign matter from the cotton. The reason why the bleaching of cotton goods in a dye beck does not give as satisfactory a white as a kier white is due to the absence of caustic soda boil in the dye beck procedure. Complete removal of waxes and oils present in cotton is necessary to prepare the goods for efficient bleaching.

Kiers are usually operated during slack periods of steam use. The bleaching operation is usually left with the night watchman who stops the process at a given time, and changes the water in the kier. When the men come in the morning, they empty the kier and then proceed to load it for the next batch.

The dye beck has a volume ratio of one pound of goods to three gallons of water, while the kier has one pound of goods to a half-gallon of water. The water and steam costs of a dye beck bleach are therefore substantially more than the kier operation. As the kier is enclosed, its steam costs must be compared to that of a closed dye beck; the steam used by an open dye beck is said to be three times that of an enclosed one. While the kier boil takes a longer period of time, the expense in steam consumption is in bringing water to the boil and not in keeping it at the boil. In labor charges, one man can handle bleaching in a ten-foot dye beck in about 3½ hours (700 pounds of goods). The labor needed for operating a two-ton kier is intermittent; it takes about four hours or so to handle the kier when the man is busy; labor costs are even less where the plant has larger kiers and production is great. Kier bleaching takes from 16 to 26 hours.

The continuous peroxide bleaching ranges of Du Pont or Becco systems, or the continuous conveyor steamer of Mathieson Alkali, have shortened the period of bleaching to a few hours. The chemical operation of the continuous range is similar to that of the kier, the difference is in the machinery. The heart of the continuous bleaching method is the large J-box or steam chamber which holds 3,000 pounds of goods at high temperatures for a period of time, one-half to one hour. Goods travels at the rate of 100 yards per minute and more through the continuous range, hence the production is substantially greater than the kier method. Though introduced in the early 1940s, the continuous peroxide bleaching ranges are now a must for any large plant bleaching cotton goods due to the competitive cost advantage of this method over kiers.

A plant handling 200,000 pounds of cotton bleaching a week is not a small plant. The investment in and operating needs of a continuous range does not justify its installation if it is to run a few days a week. The capital investment of a two-ton kier is about $7,500, and of a continuous range may be ten times as much. The kier set-up is ideal for intermittent volume. For example, a continuous range has electric motors having an excess of 100 horsepower, while three kiers operate on 15 horsepower. The production figures of the continuous peroxide range is given as 200 tons a week of cloth, three men in attendance, uses 60 per cent of the steam needed for the kier, and has a chemical cost of $2.50 per 1,000 pounds of goods.

The continuous bleaching range is a marvel in engineering with control being exercised by instruments checking steam flow, temperature of baths, air pressure to squeeze rolls, chemical fed in automatically, with relays to cut steam and water supply when a motor stops, all motors being synchronized for the even movement of goods through the range.

Cotton is the only fiber bleached in kiers or the continuous range. Blends of cloth containing a small percentage of synthetic fibers along with the cotton might be bleached in kiers, but this is risky due to the action of caustic on the synthetic fiber. The bleaching of synthetic fibers cannot be broken into a cost analysis distinguishing between the different machines as these fabrics are run on one type of machine. Wool and silk are other fibers which cannot be handled in kiers due to the deteriorating action of caustic soda.

Viscose and acetate are handled by same methods used in dye beck bleaching of cotton except for probable reduction in the use of bleaching materials. Recently, mention of peracetic acid has been made as a bleaching material for synthetic fibers. Hydrogen peroxide is used to bleach wool and silk with care being taken as to the alkalinity of the solution. Prolonged bleaching of silk with hydrogen peroxide will yellow the fiber, hence bleaching must be stopped as soon as a desirable white is attained.

After cloth has been bleached, it is usually blued so as to make the cloth a blue-white rather than cream-white. The material used for bluing is a dye selected with respect to the fiber bleached: Flourescent Purple, Direct Sky Blue FF, Acetate Violet B, Acid Violet 4 BM, Alizarine Blue, Indanthren Blue, Prussian Blue, or Ultramarine Blue. Tinopal BVA (Geigy) has proved to be an excellent material for making goods whiter; it is not a bluing agent, but acts as a dye working on the optical principle of removing the yellow element from cotton and viscose rayon cloth. Tinopal is not suitable for acetate and nylon, and should not be used if a cationic finish is to be used on the goods. Tinopal may overcome the yellowing caused by hot calendering, starches and softening agents. When goods yellow *after* bleaching in the plant, the finishing methods should be suspected as the offender; this can be ascertained by checking the cloth which has been bleached and hand-dried against the cloth put through the finishing processes. Some starches for example break down to yellow materials when exposed to excessive heat. Cationic softeners have a tendency to yellow white goods. Recently, there was announced the production of a cationic softener which does not yellow whites or change the color of dyed goods.

Tentative Program For A.A.T.C.C. Parley

The tentative program for the 28th national convention of the American Association of Textile Chemists and Colorists, to be held Oct. 13-16 at Atlantic City, N. J., reveals that the technical sessions have been re-arranged from recent conventions so that the intersectional contest for the prize research paper falls on Friday afternoon, Oct. 14, with two technical sessions each on Friday and Saturday mornings and the general session on Thursday afternoon.

NOW NO FLICKER OF THE POINTER

. . . when you use this new Tensometer with dampening device to check tension on high-speed quillers, cones, etc.

We have developed a method of by-passing the considerable sudden fluctuations that sometimes occurred in Tensometer readings, to give a steady recording in all uses.

SIPP-EASTWOOD TENSOMETER enables you to detect faulty tension in warping, winding, and quilling. It slips handily into your pocket and has a knurled case to prevent its slipping out of your hand accidentally.

Send for free illustrated descriptive folder and prices.

SIPP-EASTWOOD CORPORATION

P. O. BOX 1370 PATERSON, NEW JERSEY

Domestic Agents:

S. Fred Toll
2128 Green St.
Charlotte 1, N. C.

J. S. Fallow & Co.
New Bedford, Mass.

Houghton Wool Tops

PROMPT SHIPMENT ALL GRADES ON SHORT NOTICE

SUITABLE FOR BLENDS WITH RAYON OR COTTON

Write or Phone Our
Sou. Representative
JAMES E. TAYLOR
Telephone 3-3692
CHARLOTTE, N. C.

HOUGHTON
WOOL COMPANY
253 SUMMER STREET ★ BOSTON

J. E. SIRRINE CO.

GREENVILLE • SOUTH CAROLINA

Engineers

ESTABLISHED 1902

TEXTILE MILLS • RAYON PLANTS • KNITTING MILLS • DYE HOUSES
BLEACHERIES • STEAM UTILIZATION • STEAM POWER PLANTS
WATER • WASTE DISPOSAL • APPRAISALS • PLANS • REPORTS

You'll find Clinton Quality Starches Tops for Every textile purpose!

● Clinton Textile Starches are scientifically manufactured and guaranteed for unvarying uniformity and pH control. Clinton Starches give your warp the necessary body, strength and pliability that means quality weaving every time. Reduce loom stoppage and increase production with Clinton Textile Starches. For years Clinton has been a leader in the production of starches for all textile purposes.

You'll find our staff of highly trained technicians helpful and profitable in solving your sizing problems. Without obligation, write or call Clinton Industries, Service Laboratory, Clinton, Iowa.

CLINTON
Corn Syrup
Clintose
(dextrose)
Dextrin
No. 70 Sugar

CLINTON

Clinton Industries, Inc.
CLINTON, IOWA

Contact: R. C. Rau, S. E. Mgr. Clinton Sales Co., 918 Mortgage Guarantee Bldg., Atlanta 3, Ga.
Boyce L. Estes, 343 Mimosa Dr., Decatur, Ga.
Grady Gilbert, Box 342, Concord, N. C.
Jack Gibson, 900 Woodside Bldg., Greenville, S. C.

Promotions, Resignations, Honors, Transfers, Appointments, Elections, Civic and Associational Activities

PERSONAL NEWS

D. A. Ahlstrand of Atlanta, Ga., who has represented Graton & Knight in the South for the past 31 years, has taken on the complete line of textile mill leather belting and specialties manufactured by Chicago Belting Co. He and Sam P. Dixon, also a former Graton & Knight representative, will sell through distributors throughout the South.

D. E. Long is now superintendent of Georgia Duck & Cordage Mill at Scottdale, Ga.

R. V. Carlyle has been named overseer of weaving at Oconee Textile Mills, Inc., Whitehall, Ga., succeeding W. A. Nelson, resigned.

Charles H. Ponder has succeeded J. R. Wikle, resigned, as superintendent of Calvine Cotton Mills, Inc., Charlotte, N. C.

J. Walton Brown has accepted a position in the engineering department of Carter Traveler Co. and Mill Devices Co., divisions of A. B. Carter, Inc., and from headquarters in Atlanta, Ga., will cover the Georgia, Alabama, Tennessee and Mississippi territory. Mr. Brown succeeds Tom Hunt, who resigned to accept a position in South America.

A. J. Matthews has retired as foreman of the bedspread mill of Fieldcrest Mills, Inc., at Leaksville, N. C. Mr. Matthews had been connected with the firm for 31 years and his retirement is in accordance with the firm's retirement program. . . . T. B. Hamrick has been promoted from night foreman of the blanket mill to day foreman of the sheeting mill at Draper, N. C.

J. G. Shedd resigned July 15 as manager of the Ottaray Plant of Monarch Mills at Union, S. C., to become general manager of M. Lowenstein & Co.'s Lane Mills Division at New Orleans, La. . . . E. H. Bost, formerly manager of Plants No. 2 and 5 of Erwin Cotton Mills Co. at Erwin, N. C., is now superintendent of the Lane plant.

W. F. Bird has been appointed vice-president and chief administrative officer of Collins & Aikman Corp. . . . W. Rollin Keen has been named director of the research and technical control division.

Robert Pharr, formerly connected with Dwight Mfg. Co. at Alabama City, Ala., is now assistant superintendent of Mandeville Mills, Inc., at Carrollton, Ga. . . . John T. Vaughan, paymaster at Mandeville, retired Aug. 5 after 38 years service with the firm.

W. D. Shepherd of McAdenville, N. C., is now general overseer of the Adrian and Madora Plants of American Yarn & Processing Co., Mt. Holly, N. C.

W. F. Crowder is now superintendent of Jordan Spinning Co. at Cedar Falls, N. C. Mr. Crowder formerly was superintendent of the Nelson Plant of American Yarn & Processing Co.

J. L. Buckner retired Aug. 1 as vice-president of Corn Products Refining Co. He had been connected with the firm for 37 years.

Harry W. Flynn resigned Aug. 1 as manager of the Celanese Lanese Corp. spun yarn plant at Burlington, N. C. Mr. Flynn was employed by King Cotton Mills Corp. from 1936 to 1941 when the physical plant was acquired by Celanese Corp. of America. He remained with Celanese since that time.

John K. Park has been appointed manager of research and development for Fiberglas textile products for Owens-Corning Fiberglas Corp. During the past two years he has served as manager of product research and development at the Newark, Ohio, laboratories of the firm.

Winston Garth, formerly assistant superintendent of Dallas Mfg. Co. at Huntsville, Ala., is now connected with the purchasing department of Deering, Milliken & Co. at Spartanburg, S. C. . . . Louis B. Scarboro, formerly overseer of spinning at Dallas Mfg. Co., is now with the Trion (Ga.) Division of Riegel Textile Corp.

Charles Gordon Tate, retired textile executive of Morganton, N. C., and J. Chester Johnson, purchasing agent for Mooresville (N. C.) Cotton Mills, have been appointed to four-year terms on the board of trustees of the North Carolina Vocational Textile School at Belmont. They replace C. A. Rudisill of Cherryville and F. J. Jackson of Davidson, N. C.

D. F. Lanier has retired as superintendent of the Oxford (N. C.) Plant of Burlington Mills Corp. after having served as superintendent of the plant for over 40 years. He continues to serve the firm in an advisory capacity. . . . Marshall McManus, who has been serving as general assistant to Mr. Lanier, has been named to succeed him as superintendent.

Frank Ross, national manager of lubrication for E. F. Houghton & Co., has been appointed to the newly-created post of assistant to the vice-president in charge of sales. Mr. Ross, who has transferred his headquarters from the Cleveland office to Houghton's home office in Philadelphia, retains his duties and title as head of the lubrication department.

J. M. Jackson has resigned as assistant to the general superintendent of Columbus (Ga.) Mfg. Co., a subsidiary of West Point Mfg. Co., to become superintendent of Gaffney (S. C.) Mfg. Co. Mr. Jackson succeeds A. L. Taylor, who recently resigned to become manager of Union-Buffalo Mills at Union, S. C.

Dr. Martin Wadewitz, formerly plant manager of North American Rayon Corp. at Johnson City, Tenn., and Dr. John Bitter, research director for the firm, have severed their connections with North American Rayon and are now connected with American Enka Corp. at the firm's Enka, N. C., plant. Dr. Wadewitz will be technical director of the company and Dr. Bitter will be director of research. . . . Dr. A. J. L. Moritz has retired as technical vice-president of North American Rayon, for reasons of health, but continues to serve in an advisory capacity. It is expected that he will shortly become a member of the board.

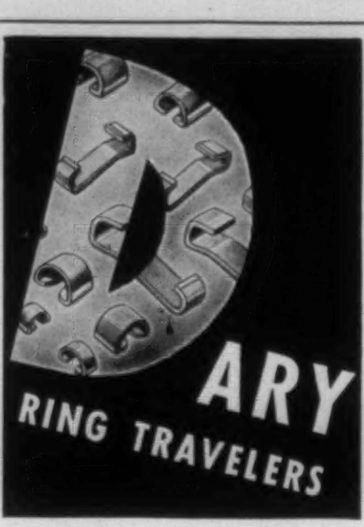
C. A. Townes has resigned as agent and buyer for the Aragon (Ga.) Mills of A. D. Juilliard & Co., Inc., and has been succeeded by John Latham. Mr. Latham previously was superintendent of Seminole Mills at Clearwater, S. C. . . . W. M. Harris has been named controller at Aragon, having been transferred to that post from the firm's Floyd Mill at Rome, Ga. . . . James C. Platt has succeeded H. F. Neal as superintendent of the Aragon plant.

Hugh M. Comer, president of Avondale Mills, Sylacauga, Ala., will be guest of honor at an industry-wide textile-garment dinner at the Hotel Astor, New York City, Oct. 4, at which time he will be hailed as the textile industry's "greatest ambassador."

Louis M. Boulware has been named manager of the Fisk Cord Mills of U. S. Rubber Co. at New Bedford, Mass., succeeding Frank L. Burns, retired. Mr. Boulware previously has been with U. S. Rubber Co. plants at Winnsboro, S. C., Hogansville, Ga., and Scottsville, Va. He is a native of Newberry, S. C.

J. R. Angel has been appointed Southern representative for Cook-P & N Machine Co., Inc., Boston, Mass., manufacturer of equipment for finishing textiles. Mr. Angel makes his headquarters at the Mortgage Guarantee Building, Atlanta, Ga.

Henry Rawson, divisional superintendent of the Rock Hill (S. C.) Printing & Finish-



Traveling Salesmen

Dary has five of the most competent representatives in the traveler industry but perhaps the most prolific Dary salesman is the Dary Ring Traveler itself! The superior all-round performance of Dary Travelers on every spinning and twisting assignment is all the sales talk most spinning room foremen need. One trial quickly demonstrates the hard, smooth durability and uniform balance which make Dary Travelers last *longer*—even at higher spindle speeds.

The next time you need travelers specify Dary Ring Travelers. These "traveling salesmen" will tell their own sales story as you watch their superior on-the-job performance around your spinning rings. Your regular Dary representative will be glad to help, too. Call him whenever you want traveler information.

DARY PROCESSED SYMBOL OF SUPERIORITY

The DARY RING TRAVELER CO.
TAUNTON, MASSACHUSETTS

John E. Humphries, Box 843, Greenville, S. C.
John H. O'Neill, Box 720, Atlanta, Ga.
James H. Carver, P. O. Box 22, Rutherfordton, N. C.
Crawford Rhymer, P. O. Box 2261, Greenville, S. C.

ing Co., has resigned his post with that firm after 21 years service to accept a position as manager of Uncas Printing & Finishing Co. in Putnam, Conn.

Charles R. Ibach, Jr., a 1948 graduate of the School of Textiles of North Carolina State College, has joined the sales staff of Pen Wilson Co. of Charlotte, N. C. For the past year Mr. Ibach had been a member of the sales staff of Oliver D. Landis, Inc., textile supply firm of Charlotte.

Dudley M. Dunlop has been named to succeed the late Isaac E. Wynne as director-agent for Universal Winding Co. in the firm's Charlotte, N. C., office. Mr. Dunlop previously was assigned to Universal's Boston office and covered the northern New England states. He will be associated in Charlotte with R. M. Mauldin of the Universal Division and Frederick Sails of the Atwood Division.

Alvin Caplan, who resigned recently as superintendent of Lane Cotton Mills Co., New Orleans, La., has joined Industrial Machinery Co. of New Orleans. Mr. Caplan is a sales engineer.

Charles D. Cobb has been appointed complaints investigator in the Celanese Corp. of America plant at Rome, Ga. A textile engineer assigned to the research department since 1947, Mr. Cobb succeeds R. L. Cheatham, who resigned recently. Mr. Cobb was graduated with a B. S. in textile engineering at Clemson College in 1940. He worked for Springs Cotton Mills in South Carolina for two years before volunteering for service in World War II. Mr. Cobb's first assignment in the Rome plant was as a shift foreman in the viscose coning department. He later worked in a supervisory capacity for Dan River Mills, after which he returned to Celanese for an assignment in the research department.

Earle M. Spencer, secretary and treasurer of Valdese (N. C.) Mfg. Co., was elected president of the Catawba Valley Executives Club at a recent meeting of directors in Hickory, N. C.

Herman F. Stuhr, Jr., has been named technical superintendent and Samuel A. McNabb has been named chief plant industrial engineer at the Nitro, W. Va., plant of American Viscose Corp. Mr. Stuhr has been with the corporation since June, 1940, and Mr. McNabb since September, 1946.

Eugene E. Ford has been elected secretary of Industrial Rayon Corp., following the resignation of Frederick L. Bissinger from that post. Mr. Bissinger continues as vice-president in charge of research.

OBITUARIES

Leroy S. Converse, 54, director of the standards department of American Viscose Corp. at Marcus Hook, Pa., collapsed and died at the wheel of his car July 6 while returning to his home at Ridley Park, Pa. Surviving are his wife, his mother, a daughter, two sons and a sister.

NEW C.I.O. SOUTHERN ORGANIZING DRIVE DIRECTOR is George Baldanzi, *left*, who succeeds the late Van Bittner. Textile Workers Union of America Executive Vice-President Baldanzi had worked closely with Van Bittner in the drive to organize plants in the South. He is 42 and a national director of the C.I.O. organizing committee.

George Baldanzi came from Massachusetts where textile mills are liquidating rather than continue to operate under the C.I.O.

Thomas S. Florence, 73, associated with Fulton Bag & Cotton Mills of Atlanta, Ga., for 49 years, died July 27 while driving his car. Mr. Florence was head of the personnel and paymaster's department of the firm. Surviving are four sisters and two brothers.

Edward W. Freundt, 47, manager of the chemical division of Armour & Co., died suddenly July 3 in Seattle, Wash., where he was vacationing. Surviving are his wife and a daughter.

C. K. Gailey, Sr., 74, of Conyers, Ga., a cotton buyer for Callaway Mills of LaGrange, Ga., died last month. Mr. Gailey, a former mayor of Conyers, is survived by two sons.

Ernest Hall, 76, for 23 years foreman of the weaving room at West Point (Ga.) Mfg. Co.'s Fairfax, Ala., plant, died Aug. 3 at his home. He was born in Yorkshire, England.

Leo P. Heneghan, 59, purchasing agent for Fulton Bag & Cotton Mills, Atlanta, Ga., died recently at his home in St. Louis, Mo. Mr. Heneghan, who had been connected with the firm for more than 30 years, is survived by his wife, a son and three daughters.

James L. Lohrke, 53, inventor and owner of patents on the Perlok System for converting continuous filament or tow into sliver, rovings or yarn without using conventional methods, died last month at a hospital in Philadelphia, Pa. Mr. Lohrke was one of the founders of Fiber Products Co. in 1925 but since 1929 had devoted his time to the development and promotion of the Perlok System. Surviving are his wife, a son, a daughter, two sisters and three brothers.

John A. Miller, former president of Exposition Cotton Mills, Atlanta, Ga., and American Textile Co., Cartersville, Ga., died

See "*Before Closing Down*" *for more Personal News*

It was...

It is no accident that this company has 4 factories, 6 repair shops and 7 distributing points in strategic textile areas. It was planned from the beginning to make the best possible card clothing of all types, to make it readily available to all sections of the textile industry and to render a service which would promote the most efficient use of Ashworth Products.

In furtherance of this policy, we have recently built and placed in operation a new modern factory in Greenville, S. C. This step will assure better service for our Northern customers as well as our Southern customers, since it will relieve the pressure on our Northern factories.

Ashworth service includes not only the manufacturing and delivery of the best in card clothing, but also card clothing surveys and recommendations. One of our practical card men will inspect your card clothing, bearings, chains, settings, etc., and, if necessary, recommend repairs and changes which will save you money or increase production.

This service is free. Ask us about it.

ASHWORTH BROS., INC.
AMERICAN CARD CLOTHING CO. (Woolen Div.)

FALL RIVER*†‡ WORCESTER*‡ PHILADELPHIA*†‡ ATLANTA†‡
GREENVILLE*†‡ CHARLOTTE†‡ DALLAS†‡ (Textile Supply Co.)
Factory †Repair Shop ‡Distributing Point

PRODUCTS AND SERVICES: Card Clothing for Cotton, Wool, Worsted, Silk, Rayon and Asbestos Cards and for all Types of Napping Machinery. Brusher Clothing and Card Clothing for Special Purposes. Lickerin Wire and Garnet Wire. Sole Distributors for Platt's Metallic Wire. Lickerins and Top Flats Reclothed.

Ashworth PIONEERS IN CARD CLOTHING

4 FACTORIES . . . 6 REPAIR SHOPS . . . 7 DISTRIBUTING POINTS

PRECISION BOBBINS • PRECISION BOBBINS

PRECISION BOBBINS • PRECISION BOBBINS

PRECISION Bobbins

Are your bobbins precise inside as well as out? Inside is also important to your production. Every Precision Bobbin is made with spindle hole straight from butt to tip, with various diameters concentric.

Sales Representatives:

THE CHARLOTTE SUPPLY CO.
Charlotte, N. C.

HENRY H. HERSEY
Norwood Place
Greenville, S. C.

ARTHUR W. HARRIS
443 Stonewall St., S.W.
P. O. Box 1982
Atlanta, Ga.

H. W. CURTIS
735 West Crescent Ave.
Allendale, N. J.

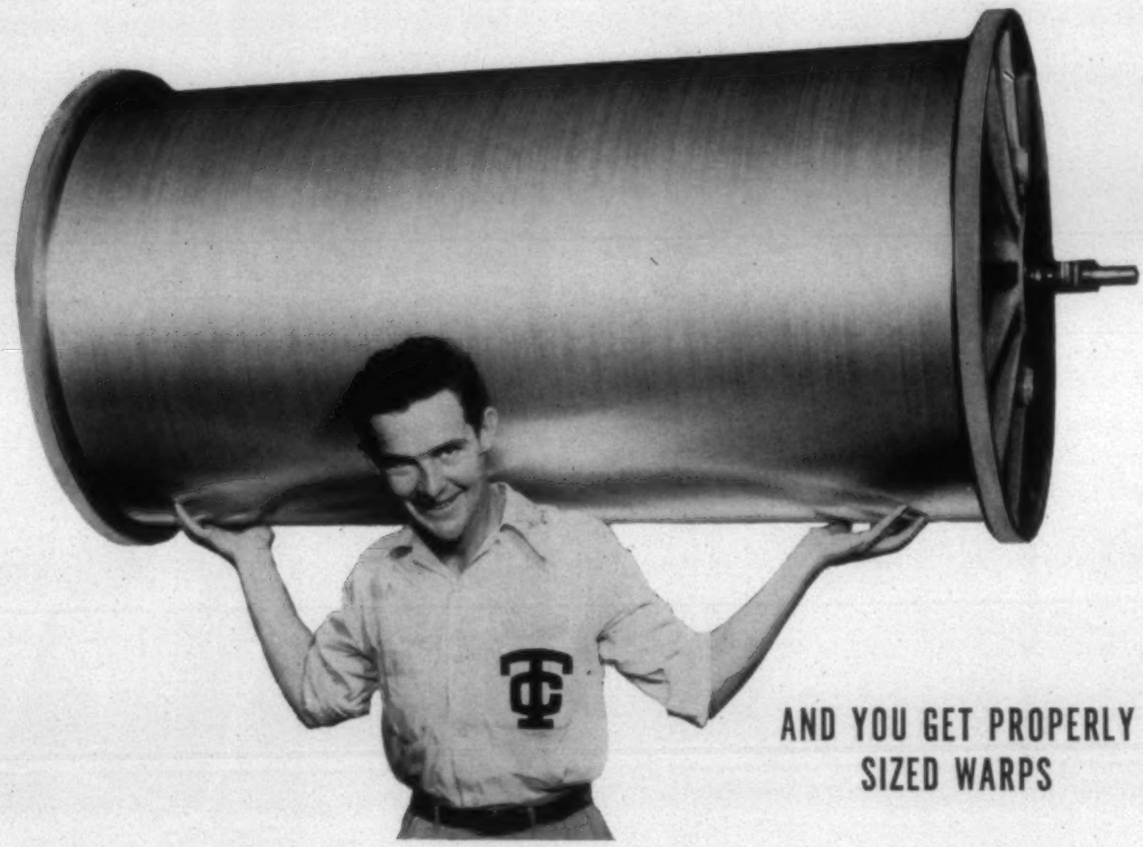
BOBBINS • PRECISION BOBBINS • PRECISION

New England
BOBBIN & SHUTTLE CO.

George M. Hambleton, Gen. Mgr.
NASHUA, New Hampshire
Telephone: 2406

DAMAGED PAGE(S)

PUT YOUR SIZING PROBLEMS ON TEXIZE SHOULDERS



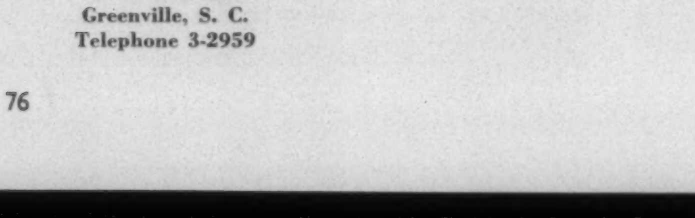
AND YOU GET PROPERLY SIZED WARPS

HERE IS AN EXPERT SERVICE that can help you. It can solve YOUR sizing problems, help you improve your processing, help you meet higher production costs with more uniform sizing methods.

Through research and testing, skilled Texize technicians go into each phase of your sizing operations—before and after each operation. They make absolutely sure what is required.

This precise testing procedure is based on the accumulated and wide experience in solving specific sizing problems under varied conditions for many mills. Texize Individual Service experience is not duplicated elsewhere. That's why more and more operators say: "Put Your Sizing Problem On Texize Shoulders"—for that is your protection and assurance of the best.

Write for more information about Texize Individual Service



Texize Chemicals, Inc.
INDUSTRIAL CHEMICALS

Home Office
P. O. Box 305
Greenville, S. C.
Telephone 3-2959

Atlanta Representative
W. M. Greer
2330 Chattahoochee Ave., N.W.
Telephone Belmont 3749

OBITUARIES

July 29 at his home in Atlanta after an illness of more than two years. Mr. Miller, retired since 1942, is survived by a daughter, a brother and sister.

Joseph K. Nowell, 52, overseer of the winding and finishing room at Henderson (N. C.) Cotton Mills, died Aug. 2 at a hospital in Henderson. Surviving are his wife, three sons, a daughter, three sisters and a brother.

Dr. J. J. Polak, 65, assistant to the technical vice-president of American Enka Corp. at Enka, N. C., died recently at a hospital in Asheville, N. C., after a brief illness. A native of Rotterdam, The Netherlands, Dr. Polak came to this country in 1940 and joined American Enka Corp.

Charles B. Sessoms, Jr., secretary-treasurer of Mansfield Mills, Inc., Lumberton, N. C., died Aug. 16 at a Lumberton hospital. Surviving are his wife and two sisters.

mill news

CONSTRUCTION. NEW EQUIPMENT. FINANCIAL REPORTS. CHARTERS. AWARDS. VILLAGE ACTIVITY. SALES AND PURCHASES

LEESVILLE, S. C. — A state charter has been granted to Edenfield Mills, Inc., which proposes to manufacture, dye and finish wool, cotton and synthetic fibers and fabrics with capital of $500,000. Officers listed are William I. Kent, president; Russell H. Kent, vice-president; and Warren T. Kent, secretary-treasurer. Besides the three officers, directors include Everett L. Kent and Ernest R. Townson, both of Clifton Heights, Pa. E. L. Kent is president and E. R. Towson is vice-president of Kent Mfg. Co., a woolen plant at Clifton Heights with capitalization of $1,600,000. The Clifton Heights plant operates 14 cards, 92 broad looms and 2,856 woolen spindles. Kent Mfg. Co. also controls Runnymede Worsted Mills at Clifton Heights, which operates 14 cards, 17 combers, 15,900 worsted spindles and 2,332 twister spindles. William I. Kent is manager of the latter plant. Leesville is in Lexington County in the central part of South Carolina, and is located on the Southern Railway.

SPRAY, N. C.—Installation of new opening machinery at the Bedspread Mill of Fieldcrest Mills at Leaksville, N. C., represents an expenditure of about $50,000. Orders have been placed for additional opening and cleaning equipment for modernization of the Blanket and Sheeting Mills at Draper, N. C. Acquisition of the new machinery is part of Fieldcrest's five-year capital program for modernization of the mills.

LANCASTER, S. C.—Elliott White Springs, president of Springs Cotton Mills, recently announced that contracts have been awarded for installation of additional machinery to increase the capacity of the Grace finishing plant, $13,000,000 facility near Lancaster which went into operation last October. The addition of a bleaching range, a mercerizing range, one dry can range with mangle and winder, one sanforizing range and one fi[illegible] ishing range suitable for applying wrink[illegible] proof and durable water repellent fini[illegible] is expected to increase the over-all ca[illegible] of the Grace finishing plant and ble[illegible] by approximately 33 per cent.

GREENSBORO, N. C. — With a [illegible] capital stock of $100,000, Ha[illegible] Inc., has received a state charte[illegible] in the manufacture and processi[illegible] products. Incorporators are W[illegible] Ruth Hamby, R. E. Nolen a[illegible] Nolen, all of Greensboro.

JOANNA, S. C.—A syste[illegible] has been installed in the[illegible] room at Joanna Cotton [illegible] about $106,000. The roo[illegible] normal average temperature of 84° F. and a relative humidity of about 60 per cent. Installation of the system was made by the Bahnson Co. of Winston-Salem, N. C.

SANFORD, N. C.—To increase the range of production of the plant, about half of the 35-inch looms at Father George Cotton Mills are to be replaced by looms of the same model but a wider cloth that is more in demand will be woven in the future. No shutdown of the plant is expected as the change will cover a period of several months before being concluded.

BRISTOL, VA. — Bigelow-Sanford Carpet Co., Inc., had dissolved the corporate organization of its subsidiary, Bristol Mills, Inc., and transferred its assets to the parent company. The Bristol subsidiary manufactures carpet yarns for use in Bigelow-Sanford carpet weaving plants.

MARTINSBURG, W. VA.—An auction sale July 28 of equipment of Berkeley Woolen Co., closed since last August after 35 years of operation, netted about $33,000, it is reported. Berkeley Woolen Co. was owned by Virginia Woolen Co. of Winchester, Va.

ROCKINGHAM, N. C.—The Senate is now considering a measure approved Aug. 2 by the House granting permanent American residence status to Nicholas C. Kalcoutsakis, an alien from Greece described as being "the only available person" who could keep open Pee Dee Mills, Inc., textile concern employing about 300 persons. Mr. Kalcoutsakis, while a temporary visitor to this country in 1947 to study textile machinery, bought an interest in Pee Dee Mills, Inc., which were closed by a [illegible] the [illegible] and told the gathering that the building was made possible through funds from the foundation and through the co-operation of the public.

LAFAYETTE, GA. — The U. S. Treasury Department last month filed a tax lien against Lafayette Cotton Mills for income tax claims that exceed $155,000. In addition, the government has a claim of $6,000 against the mill for withholding taxes claimed to have been deducted by the firm from wage checks and not paid to the treasury. The plant, employing about 400 persons, has not been in operation since July 21 when the income tax lien was filed.

JEFFERSON, GA.—New machinery installed at Jefferson Mills, Inc., during recent months includes pickers, carding machines, drawing frames, roving frames, warp spinning frames, warpers, winders and slashers. In addition, looms have been modernized and new humidifiers and lighting installed.

GREENSBORO, N. C.—A new $500,000 office building for Carter Fabrics Operating Group of J. P. Stevens & Co., Inc., is to be built here. Plans for the proposed structure have been approved by the Greensboro Planning and Zoning Commission. The building is planned as a three-story structure, measuring 250 by 60 feet, and would have 45,000 square feet of operating area. The Carter group of the Stevens firm now operates nine mills in North and South Carolina and Virginia, employing about 6,000 persons.

THOMASTON, GA. — Construction of a new addition to the Sanforizing department is well underway at Thomaston Mills, with the project now one floor above ground level.

[illegible]URAY, VA.—Construction of a 75 by [illegible] foot addition is in progress at the [illegible] Textile Division of Schwarzenbach-[illegible] Co. The addition, expected to be [illegible]ed by January, will house throwing [illegible]y for nylon yarn.

[illegible]LLE, S. C.—Frank Ix & Sons has [illegible]2 tricot knitting machines which [illegible] the tricot unit of the Deering, [illegible] Co., Inc., plant here. Frank Ix [illegible]ates a tricot knitting unit at its [illegible]le, Va., plant.

[illegible]N, N. C.—Duplan Corp. is [illegible]uction at its Lincolnton plant [illegible]yons to all-filament fabrics. [illegible]ffered for sale the spinning [illegible]he plant, which has been [illegible]un rayons, and will install new looms in the space. When the change is completed the plant will be almost 100 per cent on filament goods, it is reported.

TUCAPAU, S. C.—Effective Oct. 1 the name of the local postoffice will be changed to Startex. A movement has been underway for some time to change the name of the town. The new name is taken from Startex Mill.

GRAHAM, N. C.—Travora Mfg. Co. has been sold to a new corporation known as Travora Textiles, Inc. Don S. Holt, executive vice-president of the selling company, is general manager of the new concern. Other officers of the new firm are E. T. Bost, Jr., of Concord, N. C., president; M. B. Foil, also of Concord, vice-president; J. Harris Cannon of Kannapolis, N. C., secretary and treasurer; and M. A. Rhyne of Graham a director.

CAMDEN, S. C.—Contract for roofing of the Du Pont Orlon plant now under construction has been awarded to Earl Delay & Co. of Columbia, S. C. Cost was not made public.

LEAKSVILLE, N. C.—Two boilers at the woolen plant of Fieldcrest Mills are being moved to the bedspread mill boiler room site. A smokestack 175 feet high is to be erected. When the installation is completed the one boiler plant will serve both the bedspread and Karastan mills.

ELIZABETHTON, TENN.—The sale of business and properties of American Bemberg Corp. to Beaunit Mills, Inc., authorized by stockholders of both corporations recently, has been completed. All the properties of American Bemberg have been transferred to Beaunit in consideration of the issuance by the latter to American Bemberg of 280,000 shares of Beaunit's $1.25 dividend cumulative convertible preferred stock and the assumption by Beaunit of the obligations and liabilities of American Bemberg.

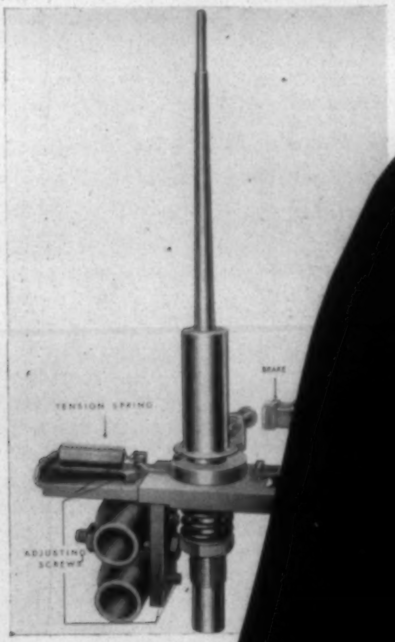
For The Textile Industry's Use

EQUIPMENT – SUPPLIES – LITERATURE

Improved Spindle Bracket Introduced By Marquette

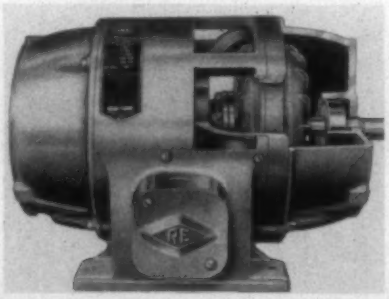
Marquette Metal Products Co., producer of Marquette roller bearing spindles with full-floating footstep bearing, has introduced an improved spindle bracket for throwing frames. The new bracket features a spring-loaded brake which brings spindle and bobbins to a quick, safe stop, leaving both of the operator's hands free for doffing. The new brake-equipped Marquette spindle bracket consists of a slide which carries the spindle on a supporting bracket toward and away from the driving belt in a straight-line movement. A simple coil spring provides even tension in bringing slide and spindle into contact with the belt. The latch disengages spindle from driving belt, and anchors slide and spindle in a fixed position. At the same time the whorl is brought into contact with the spring-loaded brake plunger. Latch is easily released, whereupon the tension spring carries the slide forward so that spindle comes in contact with driving belt.

This new brake-equipped spindle bracket offers the throwster the following advantages: A standard Marquette roller bearing spindle, operating at high speeds with large packages, can now replace the conventional short-shank spindle. Spindle speed is constant and uniform, resulting from even spring tension and belt contact. There can be no slack twist. The brake is applied automatically when the latch is drawn back; spindle is stopped quickly and safely. Spindles are easily plumbed and stay plumbed, as assembly has no pins or bushings to wear or replace. The bracket is designed for mounting on rail tubes (as illustrated), or it can be supplied for mounting on flat rails.



New Electric Motor Design Is Announced By Reuland

A new development in electric motor design has been announced by Reuland Electric Co. The new units are called Fluid-S[illegible] single frame, [illegible] drive [illegible] motors are as follows: (1) Loads that are tough to bring up to speed, even with special motors, are accelerated easily because the motor is practically up to speed before any load is applied; (2) a definite saving in power is accomplished because of a considerable reduction in starting current; (3) all starting and operating shocks are absorbed in a cushion of oil; (4) available in standard foot mounted, or round body frames and all units can be mounted horizontally or vertically, or with NEMA flange and face type ends bells; (5) many sizes in production: one-half, three-quarter, one, 1½, two, three, five, 7½ and ten h. p. units are available for prompt shipment in any of the various types outlined above.



The company invites inquires concerning [illegible]ts new product and will furnish on re[illegible]est a copy of its Engineering Folder No. [illegible]2 containing more detailed information.

[illegible]er Co. To Produce [illegible]uschamp Taylor Winders

[illegible] Machine Co., manufacturer of [illegible]ube winders, has concluded ar[illegible] with Muschamp Taylor, Ltd., [illegible] England, to manufacture and [illegible]nited States the full line of [illegible] now being produced by [illegible]or in England. Pending the [illegible]ction lines for the Foster-[illegible]nes, as they will be called, [illegible]diately begin selling and [illegible]er-Muschamp machines,

BOLSTERS

for Spinning & Twisting

When you purchase repair parts no item is so vitally important as Bolsters of top quality. Year in and year out our Bolsters, made of virgin grey iron castings, have stood the test of time. We sell Bolsters of unexcelled quality — Bolsters that give superb performance.

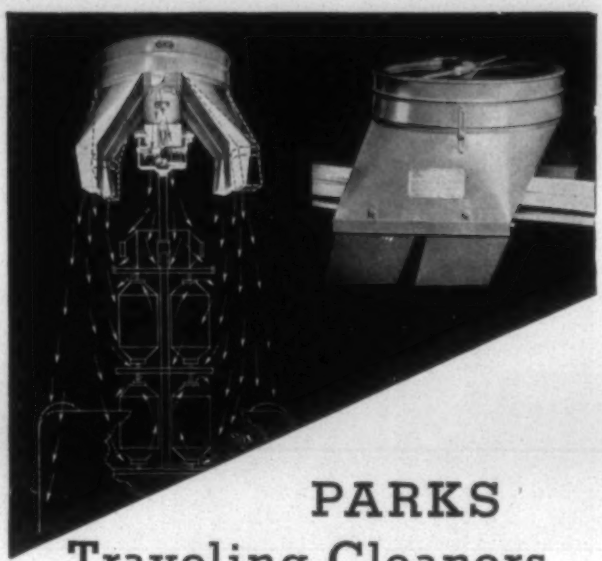
60 styles and types available for the following machines:

WHITIN **FALES & JENKS**
SACO LOWELL **H & B**

Quick shipment of all standard sizes. In ordering please submit samples.

Write For Our New Complete Parts Catalogue Which Is Just Off The Press.

E. E. SMITH & SON
QUALITY TEXTILE MACHINE PARTS
GASTONIA, NORTH CAROLINA



PARKS
Traveling Cleaners
have such fixed habits

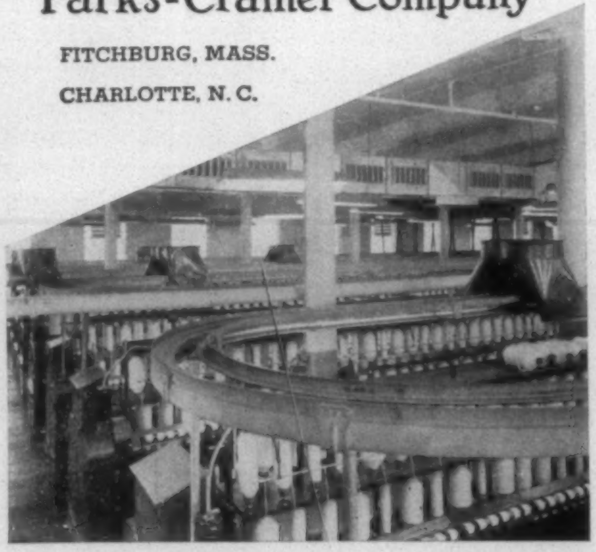
Every so often they give spinning frames (spoolers, warpers, winders, too) a mild fanning. Lint is shooed away before it has a chance to bunch.

Improves Quality	Improves Quantity
Cleaner Yarn	Fewer Ends Down
Smoother Yarn	Fewer Stops
Fewer Piecings	Fewer Pickouts
Fewer Seconds	Fewer Cutouts

Lessens waste; waste of material, waste of time. Better working conditions. More is accomplished with less effort.

Not a bad investment.

Parks-Cramer Company
FITCHBURG, MASS.
CHARLOTTE, N. C.



Bring Your ELEVATOR PROBLEMS to Monarch

27 years of wrestling with the elevator problems of Southern industry have equipped Monarch engineers with the knowledge to solve those problems.

For new elevators which have been designed to meet your individual needs, for repairs or modernization of your present elevators regardless of their make, or for regular maintenance service, bring your problems to Monarch.

SERVICE FACILITIES IN PRINCIPAL SOUTHERN CITIES

- Electric Freight and Passenger Elevators
- Oil Hydraulic Elevators
- Residence Elevators
- Dumbwaiters
- Parts, Repairs and Maintenance for All Makes

MONARCH ELEVATOR & MACHINE CO.

Greensboro, N.C. *Department C*

The Largest Firm in the Southeast Devoted Exclusively to Elevator Manufacturing

and will carry a complete stock of parts. Three types of machines are included:

(1) The Foster-Muschamp Autofill, an automatic four-spindle winder, usually furnished in machines of 20 to 40 spindles, based on well established principles which have been proven in operation all over the world. This machine is extremely flexible in that it is easily adjustable for different sizes and types of bobbins and will handle cotton, wool, worsted and synthetic yarns. (2) The Foster-Muschamp Fillwinder, a semi-automatic high speed filling winder furnished in machines of 20 individual winding heads. It is usually built as a spindle-less machine but spindle equipment can be applied if required. Despite spindle speed in excess of 6,000 r.m.p., the winding start is slow enough for the finest yarns. (3) The Foster-Muschamp Superfill Winder, a high speed machine to produce coreless filling packages of coarse yarn. Winding at over 500 feet per minute, high density packages are produced with two to three times the yardage contained in the average direct spun filling bobbin. Bottoms are available where the packages are to be used in the regular bobbin type shuttle.

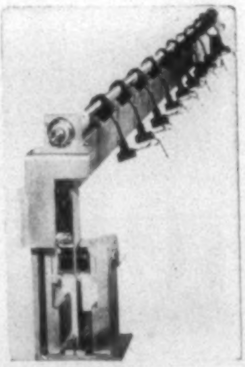
List Performance Data On Buensod-Stacey Indicator

Buensod-Stacey, Inc., has released performance data on its portable electric humidity and temperature indicator which was developed to meet the demand for direct readings of percentage of relative humidity and temperature in degrees Fahrenheit. The reading dial has two scales. The upper one is calibrated in per cent relative humidity with range of 30 per cent to 80 per cent, the lower scale having a range of 40° to 100° Fahrenheit.

The sensing elements mounted in a screened metal case are fastened to an extension rod for taking direct readings at air duct supply grilles or at any other point in an air conditioning system; otherwise, the sensing element can be attached to the electric cord direct as illustrated. Accuracy of relative humidity reading is said to be plus or minus 1-1-2 per cent; accuracy of temperature reading, plus or minum three-fourths degrees Fahrenheit; and response to relative humidity changes in from ten to 20 seconds at ten feet velocity. A bulletin giving further details is available on request.

General Electric Offers New Yarn Tensiometer

For obtaining accurate quantitative data on tension conditions in textile spinning, a new instrument, called a "yarn tensiometer," has been announced by General Electric's special products division. Developed by the company's general engineering and consulting laboratory, the new device measures yarn tension, and, by means of a recorder, gives a permanent visual record of the measurement. It provides an accurate check on the tension of yarn as it is wound on bobbins, enabling manufacturers to operate under optimum tension conditions and thus produce a firm, uniform package of yarn.



The equipment consists of a shaft, which is bolted to the frame in place of the thread-board, an armature strip which is connected to the shaft, two coils or strain gages forming a balanced circuit on either side of the armature strip, and a power supply. The tensiometer shaft is bolted to the frame so that the tensiometer yarn guides replace the regular guides on the machine. The shaft is free to move in ball bearings; its only restriction being the armature strip which is connected solidly to the shaft and is restrained at its other end by a clamp. Any pressure on the yarn guides tends to rotate the shaft causing the armature strip to bend. In bending, the armature is moved away from one coil face and nearer to the other coil face, thus upsetting the balanced circuit. The resulting current flow is a recordable measure of tension in the yarn. This unbalanced current is fed to a G. E. photoelectric recorder or some other type of recorder of suitable sensitivity.

Normally, the unit is used measuring ten ends at once; dividing the total by ten determines the average tension. The tensiometer can function, however, using only one end for gathering data on traveler or individual spindle performances. Ranges of sensitivity are readily adjustable by moving the coils closer to or farther from the armature, or by adjusting the stiffness of the blade itself. In addition to serving as a check on yarn as it is being produced, the yarn tensiometer will be a valuable set-up tool for spinning mill operators. According to G. E. engineers, it can be used when remodeling spinning frames or installing new machines, in recording effectiveness of variable-speed spinning modifications, and in experimental work.

G. E. Announces New Ultrasonic Generator

A new ultrasonic generator, providing a simple and practical method for studying the effect of ultrasonic energy on various materials and processes, has been announced by the General Electric Co. special products division. Developed by the company's general engineering and consulting laboratory, the new device is for use in research laboratories, including those of industrial organizations.

The generator converts high-frequency electrical power into high-frequency mechanical vibrations in the form of sound waves pitched considerably higher than the range of human hearing. It permits a wide operating range by providing four vibration frequencies: 300, 500, 750 and 1,000 k. c. Many possible applications in ultrasonic research are offered by the new instrument. Physically, the transforming of immescible liquids into stable emulsions and the colloidal suspension of precipitates in liquids can be examined. Investigation into chemical reactions such as oxidation, hydrolysis, and reduction is possible with the new generator. Entirely self-contained in a steel console, the equipment consists of a power unit and a transducer assembly. Simple controls mounted on the sloping front panel of the generator cabinet include on-off switches for the high voltage circuit and the filament circuit, a voltage control to vary the power, and an instrument which indicates the power supplied to the quartz crystal.

New Industrial Humidifier Is Added To Walton Line

The addition of a new model to its industrial line of Walton humidifiers has been announced by Walton Laboratories, Inc. To be known as the Model 30, this

YOU SAVE
WITH
Stainless Steel

FLANGED DRYER PANS

TROUGHS

SEPARATORS

With *Stainless Steel* colors run true in successive runs and sensitive chemicals are unaffected by metallic contamination. Reduce costs by eliminating controllable rejections. Because *Stainless Steel* is stronger . . . reduced repair and maintenance costs and longer earning life repays initial installation quickly.

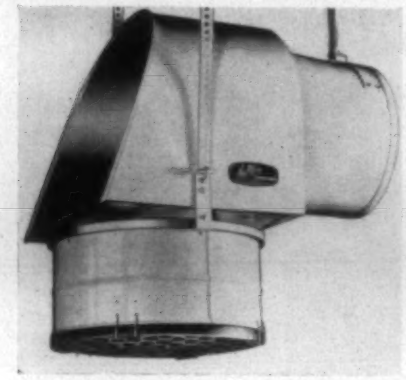
Whether your requirements be large tanks or small separators, stainless or carbon steel . . . *Truitt will fabricate it for you.* Refer your specific needs to us . . . our engineering services are available without obligation.

• • •

Fuel Tanks — Vats
Stainless and Carbon Steel Fabrications

TRUITT
MANUFACTURING COMPANY
• GREENSBORO, NORTH CAROLINA •

unit evaporates approximately three gallons of water per hour. Electrical consumption is approximately 230 watts, and, as with other Walton equipment, all that is needed is connection to a city water supply and electric current.



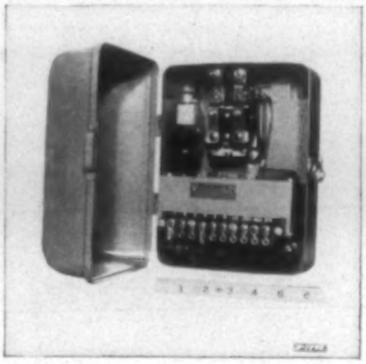
Model 30 units may be used in multiple to profide uniform, controlled humidity conditions in an enclosure, or are suitable for "spot" humidification, or for boosting the humidity obtainable from existing systems of any type. Complete and absolute diffusion of moisture with room air is obtainable with the Model 30, the company claims, as well as with the many other models of Walton industrial humidifiers. Further specifications and technical information on the Model 30, and the other Walton industrial or domestic humidifiers may be obtained on request.

Slack Selvage Eliminator Developed By Mount Hope

In addition to the many cloth handling uses already found for its free-wheeling expanders, a new unit has recently been developed by Mount Hope Machinery Co. to control slack selvage and wrinkles before cloth enters the shearing machine. The new development prevents cloth damage and considerably reduces cloth room slowdowns, it is claimed. The unit consists of two expanders mounted in double brackets with a special pivoted spring balanced lead-on roll and is mounted on the entrance end of the shearing machine. Slack is taken up in either selvage as the cloth is threaded under the tension roll. Passing over the first and under the second expander, the cloth is held taut and spread evenly across its width as it enters the shearing machine. The free-wheeling expanders have neoprene sleeves which revolve on ball bearings around a stationary bowed axle. Complete information on the slack selvage eliminator unit is available in Bulletin SSE.

Low-Energy Relays For Drop Wire Detection

New universal type electronic detecting relays, designed to operate from initiating circuits or contacts carrying small current at low voltage, are now available from Westinghouse Electric Corp. These relays are designed for drop wire detection. They can be used for warp stop control for looms using standard drop wires, bobbin changing mechanisms for looms, feeler motions for all types of knitting machines, stop motions for spoolers and warpers, liquid level controls, and similar applications with a low-current initiation circuit. Operation may be initiated by the contacts of a drop wire, contact-making instrument, or a low-resistance conducting medium between the two contacts.



Low-energy relays are available (1) as a single unit mounted in its own cabinet, or (2) as multiple unit relays involving a combination of ten circuits on a panel within a common enclosure.

Chlorine Technical Bulletin Offered By Solvay Sales

A new edition of its technical and engineering service bulletin No. 7, *Liquid Chlorine,* has been announced by the Solvay

Victor
MILL STARCH
ALWAYS UNIFORM

KEESTAR
KEE
PRODUCTS

The Weaver's Friend

**Call your
KEEVER SALES - SERVICE MAN
On Slashing Problems**

CHARLES C. SWITZER
Division Manager
Greenville, S. C.

E. M. WALLACE
Birmingham 9, Alabama

L. J. CASTILE
Charlotte 3, N. C.

E. HAYS REYNOLDS
Greenville, S. C.

TEXTILE SALES DIVISION • THE KEEVER STARCH CO.
1200 WOODSIDE BUILDING, GREENVILLE, SOUTH CAROLINA
General Offices, Columbus 15, Ohio

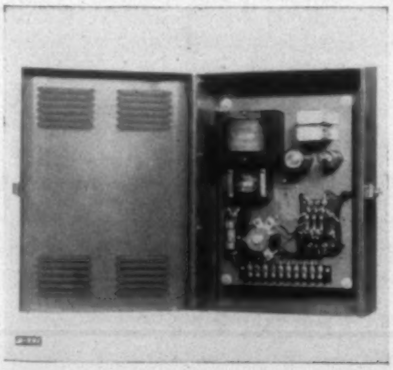
Sales Division, Allied Chemical & Dye Corp. This is the second edition of the bulletin that was issued several years ago and contains the latest information on the properties of chlorine, chlorine containers, equipment and accesories, instructions for safe handling and procedure in case of leakage or accident. This 60-page bulletin is fully illustrated with tables, charts and diagrams. Copies of bulletin No. 7, *Liquid Chlorine*, are obtainable on request without charge. Requests for copies may be made through this magazine.

A & W Machine Co. Offers Filling Feeder, Clothroll

Two items currently featured by A & W Machine Co. are the A & W filling feeder for automatic bobbin changing looms and the A & W lifetime loom clothroll. The filling feeder is designed to feed two shuttles from four cells and can be quickly set to follow almost any chain or color combination that may be used on an automatic loom. Use of the filling feeder is said to give increased production with fewer defects and to provide weavers and battery hands with more free time for other work. The A & W lifetime loom clothroll is manufactured of lightweight steel tubing 2½ or three inches in diameter. It is of complete welded construction with choice of cloth starting bars or perforated steel. Edgar E. George of High Point, N. C., recently was appointed Southern representative for the firm.

New Beam Let-Off Drive Designed By Westinghouse

A new beam let-off drive to provide tension control for low-power winding or unwinding applications in the textile industry has been designed by Westinghouse Electric Corp. This drive is designed principally for applications in the textile industry, for beam let-off or cloth wind-up on warp knitting machines or looms of any type. It may also be used on bobbin winders and similar applications. The drive is actuated by dancer contact signals from the material being wound or unwound. The drive motor speed varies over a wide range to maintain tension regardless of reel build up or material speed. A d-c dynamic braking scheme, providing rapid stopping to reduce cloth defects, is normally included. For this purpose a contact is interlocked with the main drive of the machine, stop motion relay, or other similar contacts. Beam let-off drives are designed for operation from a 60-cycle, single-phase, 115-volt, a-c power supply. For operation on 230/400/575 volts, a transformer is supplied to step the voltage down to the operating voltage of the motor. The company invites inquiries for further information.



U. S. Testing Co. To Open Memphis Branch Sept. 1

As a result of increased demand on the part of cotton growers, breeders, merchants and spinners for scientific tests to supplement the data now provided by expert cotton classers, arrangements are being made by United States Testing Co. to open a cotton fiber testing and textile branch in Memphis, Tenn., Sept. 1, according to an announcement by H. M. Block, vice-president. Tests for fiber strength, fiber fineness and fiber uniformity are becoming of major importance in the breeding of improved cotton and in the efficient spinning of cotton yarns. Many years of testing and research carried on by the United States Department of Agriculture, educational institutions and large mills have proven the practical value of these tests. Many spinning mills are now using this data to accurately predict spinning characteristics, waste, neppiness and strength of the finished yarn. These tests are also being used in the selection of the proper type of cotton for a particular yarn resulting in a considerable saving to the

STEEL STRAPPING EQUIPMENT PAYS FOR ITSELF IN JUST 3 WEEKS
--for this Leather Manufacturer!

More proof that Stanley Steel Strapping cuts shipping costs of almost any product: A Stanley representative, called in for survey, recommended Stanley Ace Strapping Tool to this leather manufacturer. *Result:* number of units packed doubled. Equipment paid for itself in 3 weeks. Find out what Stanley Steel Strapping can do for *you* now! The Stanley Works, Steel Strapping Div., 201 Lake St., New Britain, Connecticut.

STEEL STRAPPING AND CAR BANDING SYSTEMS

STANLEY
Reg. U.S. Pat. Off.

HARDWARE • HAND TOOLS • ELECTRIC TOOLS • STEEL STRAPPING

mills using this type of practical test data.

Memphis was selected as the logical location for a commercial fiber testing laboratory in view of its importance as a cotton merchandising and growing center. Having this service available in the Memphis area will permit merchants and mills to work together in selecting a proper type cotton for each application. Facilities will also be provided for conducting tests on finished yarns and fabrics in order to assist mills in evaluating a particular cotton from the opening room through the spinning and weaving operation. United States Testing Co., with main laboratories in Hoboken, N. J., maintains branch laboratories in New York, Boston, Woonsocket, R. I., Philadelphia, Chicago, Los Angeles and Denver.

New Open Width Machine Produced By Birch Bros.

Birch Bros., Inc., have announced another seven tank open width machine of stainless steel construction with roller bearing squeeze rolls to which pressure is applied by Foxboro air motors, except on the last tank which is equipped with air cylinders to give a 30,000-pound squeeze. The drive is by individual d. c. gear motors controlled by rheostats actuated by built-in dancer roll compensators to give accurate tension control. The entering end of the machine is fitted with cloth guiders and the delivery end with both a folder and rolling-up arrangement.

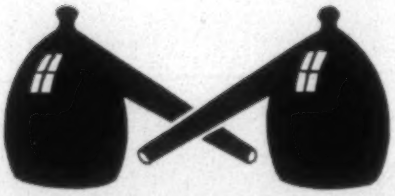
This particular machine was built for the new plant of a leading mill for scouring and crabbing rayons, rayon blends, worsteds, tropicals, serges and gabardines. Such a machine is said to be particularly essential for the uniform finishing of gabardines. Further information will be supplied upon request.

Sterling Model Lixator Features Improved Design

A new model Lixate rock salt dissolver that features several major improvements over the previous type has just been developed by International Salt Co., Inc. Based upon the company's years of experience in designing these units to meet all varieties of plant conditions, this model, called the Sterling Model Lixator, is made of durable stainless steel and, in addition, contains structural changes that make it even easier to use than the previous model. One of the major improvements on the Sterling model is the fact that it rests on two-inch pipe legs that are furnished in short lengths so that the unit will be as low as possible to the floor in order to permit easier filling with rock salt. The height of the Lixator may be easily changed to suit rearrangement of other equipment by attaching different lengths of two-inch pipe to the couplings at the bottom of the Lixator.

A second improvement eliminates the nozzle at the extreme bottom of the previous Detroit model Lixator and introduces two nozzles for flushing water located within the unit in such a way that they greatly simplify the periodic task of cleaning the interior of the dissolving tank of its rock salt filter bed and of the insoluble particles that have been filtered out of the brine. These changes in basic design, combined with the stainless steel construction, facilitate plant operation and further simplify the already simple and economical method of Lixate brine production. Because the Lixator automatically produces saturated, pure, crystal clear brine from rock salt, the company reports that its use has consistently reduced the cost of salt handling and brine production in any plant that installs it.

"The Size That Satisfies"



STODGHILL & COMPANY
Atlanta, Georgia

GREENSBORO
REED CLEANER
For cleaning rust and burrs from reeds, heddles, cutlery and miscellaneous steel parts
Greensboro Loom Reed Co.

GREENSBORO
REED CLEANER

A rubber composition impregnated with fine emery and pumice. A large size, easy to handle, 2x4⅜".

Specify if hard or soft material preferred.

GREENSBORO LOOM REED COMPANY, INC.
GREENSBORO, NORTH CAROLINA

Bradley Duo-Washfountain Described In Bulletin

A four-page folder, K711, illustrating installations of the new Bradley Duo-Washfountain is now available from the Bradley Washfountain Co. Modern design, foot control, and economy are featured. Roughing-in dimensions and diagrams indicate the compact size. Mixing valve, foot control, easily-cleaned sprayhead, and the self-flushing bowl are described under "Standard Equipment."

A. M. F. To Handle U. S. Sales For Titan, Ltd.

American Machine & Foundry Co. announced Aug. 1 it has obtained exclusive selling rights in the United States to textile machinery manufactured by Titan, Ltd., of Copenhagen, Denmark. Arrangements were made through Titan's American representative, Edda International Corp. of New York. Titan's textile machinery line currently consists of two products, the Titan automatic warp-tying machine and the Titan automatic heald indicator. The former machine ties from 6,000 to 18,000 warp ends an hour on textile looms, depending on the nature of the yarn. The automatic heald indicator facilitates preparation of a loom for the weaving process.

A. M. F.'s present plans are to stock these Titan machines, the stands, accessories, and parts of the equipment. Sales of the Titan line has been assigned to A. M. F.'s stitching machine division. Titan is currently completing development of other new machines, which promise to offer marked advantages to the textile industry. These will be announced to the trade by Edda and A. M. F. when the current field-testing has been completed.

Brochure Gives Uses Of Scotch Textile Tapes

Scotch brand textile tapes for use in eight operations in textile mills are described and pictured in a new brochure available from Minnesota Mining and Mfg. Co. The four-page brochure includes 11 photographs and describes tape uses in weaving, spinning, slashing, finishing, carding, warping, knitting and packaging. Among uses illustrated are taping thread ends on a warp; use of tape for temporary butt splicing; double-coated tape for starting the wind of cloth on shells; and tape for tabbing and holding the last lap of cloth on a roll.

Bulletin On Fire Safety During Plant Shut-Downs

Fire safety during plant shut-downs is the subject of a bulletin recently issued by the engineering division of the Associated Factory Mutual Fire Insurance Cos. Based on actual fire experience, it lists those items requiring attention before a plant is closed for vacation or other extended period, and outlines precautions needed during the shutdown. The bulletin points out what to do about housekeeping, waste disposal, and flammable liquids and gases in eliminating sources of fire. It shows what part of the electric power, steam power, and heating should be kept in service for fire protection, and includes specific suggestions for maintaining watch service and checking the protective equipment. Special precautions for alterations and repairs are emphasized, particularly on the use of cutting and welding torches, and during changes that involve shutting off sprinkler protection. A copy of the bulletin may be obtained on request from the Factory Mutual Engineering Division, 184 High Street, Boston 10, Mass.

Bulletin Describes Merlon Dispersions

Three bulletins on the Merlon series of thermoplastic resin dispersion for producing durable finishes and coatings without curing in textile applications have been compiled by the textile chemicals department of Monsanto Chemical Co.'s Merrimac Division. The Merlon bulletins include a list of suggested uses, general properties, mechanical stability, film characteristics and specifications.

Sylvania Electric Issues Fluorescent Fixture Catalog

A new 74-page catalog covering its complete line of fluorescent lighting fixtures has been published by Sylvania Electric Products, Inc., and is available for distribution. Printed in two colors on coated stock, it is

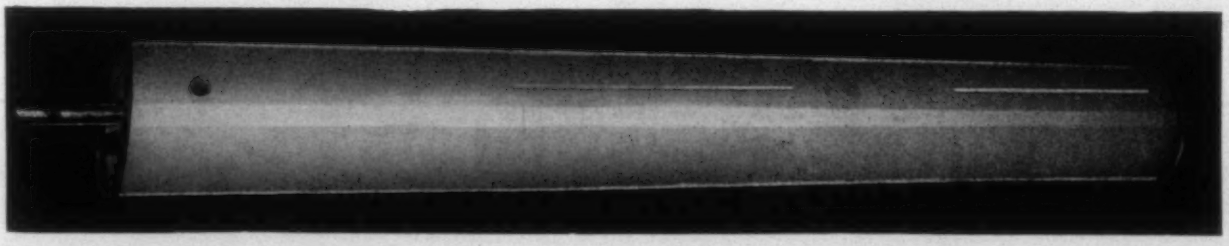
GET UNIFORM QUALITY WITH JENKINS Dynamically Balanced SPINNING CYLINDERS

Take those vibrating cylinders off your "payroll" . . . replace them with Jenkins Dynamically Balanced cylinders, and watch operating costs go down and yarn quality go up.

PROMPT SERVICE

Our expansion program is completed, our production more than doubled, and we are happy to announce that we can give much better service on all orders for spinning cylinders . . . also picker and card screens.

Don't waste time wondering what Jenkins Dynamically Balanced cylinders can do for you . . . place your order now—or write today for complete information.



JENKINS METAL SHOPS, Inc.
GASTONIA, NORTH CAROLINA

FOR THE TEXTILE INDUSTRY'S USE—

the first fluorescent fixture catalog Sylvania has issued since 1947 and contains 28 more pages than the previous edition. Over 60 photographs of industrial, commercial and troffer fluorescent fixtures, starters, fluorescent lampholders and starter sockets are shown. Detailed descriptions, diagrams, charts on technical data and specifications of every fixture are included. An unusual feature of the new book is the fact that each of the three main sections—industrial, commercial-residential and troffers—is a complete catalog in itself and can be detached as a separate unit, for distribution to jobbers and others who do not require the entire catalog.

A supplementary section provides a practical guide on how to plan a fluorescent lighting installation, including details on: (1) how much light is needed, (2) which fixture will do the job, (3) how many fixtures are required, and (4) which is the best fixture arrangement. Also, a chart is provided showing the amount of illumination required for approximately 80 typical fluorescent lighting applications, including store showcases and window displays, commercial and professional offices, classrooms, hospitals, auditoriums, warehouses and dental chairs. Two pages are devoted to every fixture in the catalog, with all necessary facts furnished on application, construction, mounting methods, continuous row mounting, reflectivity, maintenance and lamp spacing. There are also diagrams showing top, front and side views of each fixture, with all parts labeled, plus brightness data and distribution patterns. In addition, with each fixture is a chart estimating how many of that particular fixture are needed to provide sufficient light for specific room sizes and wall and ceiling conditions.

The industrial fixture section contains a full page of illustrations of Sylvania's seven versatile mounting methods—chain suspension, surface mounting with bolt or lag screws, pendant mounting with single 5/16-inch rod support, right angle or parallel-cable suspension, adjustable cable-clamp suspension, chain suspension direct to fixture and conduit mounting direct to fixture. A series of photographs showing how to remove and replace lamps and reflectors for servicing is another feature. In the commercial fixture section, maintenance features which provide easy access to lamps and starters are pictured. Sylvania's four mounting methods for commercial fluorescent fixtures—individually or continuously, either surface or pendant—are also illustrated. In the section on troffers three installation methods are described and diagrammed: lath and plaster on steel furring, any ceiling finish on wood framing and acoustic tile on tee-bars.

New Testing Machine Announced By Baldwin

A new universal testing machine (Model PTE) having a capacity of 5,000 pounds is announced by Baldwin Locomotive Works. Hydraulic and pneumatic load cells are used as load-sensitive elements in the weighing

INVESTIGATE PILOT LIFE'S UNUSUAL GROUP INSURANCE PLANS

"PILOT PLANNED" MEANS THAT . . .

IS CUT TO FIT YOUR *OWN* SPECIFIC NEEDS

We design Group Insurance Plans for Southern Organizations . . . with benefits to cover loss of life and sickness for employees; and surgery, hospitalization, and maternity for both employees and their dependents.

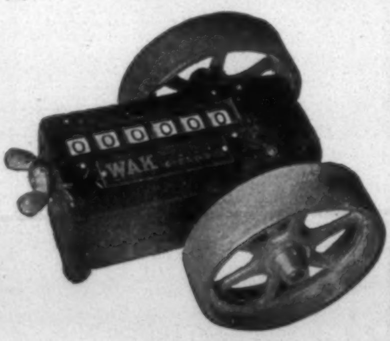
We suggest you investigate today!

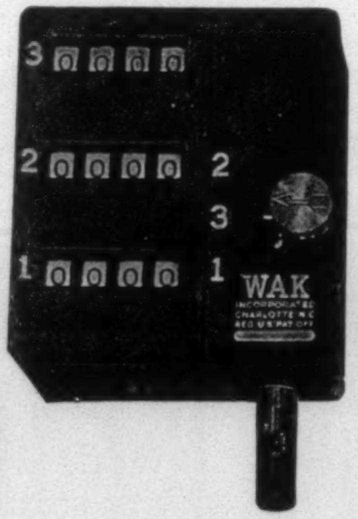
Call or write,

J. F. FREEMAN, Vice President Group Division

PILOT LIFE INSURANCE COMPANY

O. F. STAFFORD, *President* + GREENSBORO, N. C.





★ "YOU CAN COUNT ON **WAK*** COUNTERS"

They Are
Rugged
Accurate
Dependable

WE MANUFACTURE
RESET AND NON-RESET
SINGLE-DOUBLE-TRIPLE

Hank Clocks
Pick Counters
Ratchet Counters
Rotary Counters
Slasher Counters
Tenter Counters
Twister Counters
Inspection Table Counters
Sewing Machine Counters
Yardage Counters
Hosiery Counters
Special Counters

★

*T. M. Reg.
U. S. Pat. Off.

WAK INDUSTRIES
CHARLOTTE, N. C.

system, both operating a Tate-Emery indicator. Four standard load ranges are provided by the hydraulic cell. These are 5,000 pounds, 1,000 pounds, 200 pounds and 50 pounds. Two additional ranges of ten pounds and two pounds are provided when specified, by means of an air cell. These machines are suitable for testing textile materials, fibers, cord and other materials. Tension space may be 3⅜ to $51\frac{7}{16}$ inches and compression space 0 to 48 inches. Clearance between vertical screws is 18¼ inches.

The indicator is contained in a separate cabinet, as with all larger Baldwin testing machines, thus giving flexibility in the relative positioning of the two units. Features of a new design of cabinet are (1) heavy gage sheet steel, (2) ample space for special accessories for control and indication, (3) accessibility to mechanism through easily removable rear panels, and (4) indirectly lighted indicator dial. All loads are indicated on a 20-inch masked dial with a 66-inch scale. Load ranges are shifted instantly by solenoid-operated air valves that are controlled by means of a knob located on the indicator control panel board.

Tension and compression loads are applied by a straining cross-head which is motor-driven by two vertical screws giving a 48-inch stroke. Loading speeds are held constant by electronic controls in a 400:1 range of .05 to 20 inches per minute. Accuracy of the load indications is within 0.5 per cent of reading, or one scale division, for the upper three ranges and within 0.75 per cent of reading, or 1.5 scale divisions for the lower three ranges. A recorder may be used with the machine and will plot stress-strain curves with ten-inch ordinate for one-half and full capacity of any range. For example, a stress-strain curve can be obtained having a full ten-inch scale equivalent to 1.0 pound. The machine is designed for automatic reversal and cycling of loads and may be used with recorder to plot hysteresis curves automatically.

Boiler Equipment Service Extends Its Operations

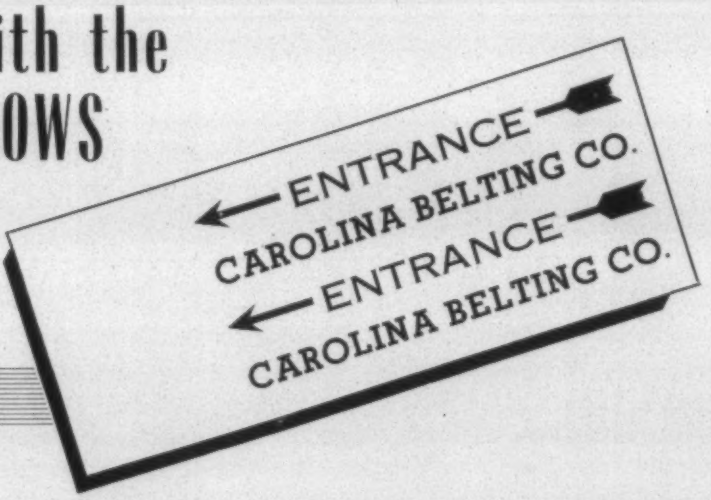
Boiler Equipment Service Co. of Atlanta, Ga., sales and engineering representatives for Cochrane Corp. in the Georgia and Florida territory for industrial water treating equipment and steam specialties have also been appointed representatives for Cochrane for the state of Alabama, less Mobile and Baldwin counties which are handled by the Allan J. Harris Co. from New Orleans. E. A. Brooks, J. E. Fearon, D. T. Sheffield, W. C. Morrison and C. G. Acree are the individuals covering this territory.

Cleaning Manual Offered By Oakite Products, Inc.

Individually listed and conveniently arranged for ready reference in a new, 18-page *Textile Digest*, are descriptions of simplified procedures for performing more than threescore maintenance cleaning and related tasks in textile mills. Published by Oakite Products, Inc., longtime manufacturer of cleaning and allied materials, this new cleaning manual offers valuable recommendations on latest developments in materials and methods designed to keep textile equipment and machinery at peak operating efficiency. In addition to providing detailed information on specific materials and procedures for performing many commonly encountered textile-equipment cleaning tasks, the digest also supplies helpful data on effective slime and mold control methods for mill humidifying and air conditioning systems; on simplified descaling techniques for heat exchange equipment; and on a broad range of miscellaneous mill maintenance and sanitation work. An interesting section of the digest devoted to the steam-detergent method of cleaning lists the applications of this method and the benefits resulting from its use. Featured in this section is a special chart illustrating the various types of steam-cleaning guns available from this manufacturer and listing the specifications and job-applications of each.

How a new, emulsion-type detergent, Oakite Composition No. 99, makes possible substantial economies in the cleaning of textile mill machinery, is described in a special service report just issued by Oakite. Oakite Composition No. 99, the manufacturers state, is a liquid material that readily forms emulsions with water. Used in varying dilutions, depending on the nature and extent of the soils to be removed, this emulsion-type detergent has demonstrated in extensive tests its ability to provide rapid, thorough removal of dirt, oil, grease and lint from such textile equipment as looms, spinning frames, winding and twisting machines, etc., and to perform the cleaning operation at far lower detergent cost than when hydro-carbon solvents or mineral spir-

The Leather with the
ENTRANCE ARROWS


ENTRANCE
CAROLINA BELTING CO.
ENTRANCE
CAROLINA BELTING CO.

A weave mill superintendent recently explained his first purchase of our HEART-OF-HIDE leather as follows: "We were having trouble with box front leathers. Our new Overseer of Weaving remembered your leather from his last job. He forgot your company's name, but he knew he wanted THE LEATHER WITH THE ENTRANCE ARROWS."

CAROLINA *Belting Company*

POST OFFICE BOX 1377 • 26 AUGUSTA STREET • GREENVILLE, S. C.

its are employed for this purpose. Solutions made up with Oakite Composition No. 99 and water may be applied to equipment by spraying, brushing or wipe-on methods, the manufacturers report, are allowed to soak briefly on surfaces to soften and penetrate deposits, then blown off with compressed air or removed by hand wiping to complete a thorough cleaning operation. Oakite Composition No. 99, the manufacturers state, offers the following benefits when used for machine clean-up tasks: (1) reduces detergent costs; (2) cleans rapidly; (3) does not leave equipment tacky or sticky; (4) does not attack or streak painted surfaces; (5) is non-flammable in undiluted form, noncombustible when diluted with water; (6) does not rust metal surfaces; and (7) is easy on the hands, pleasant to use. Readers desiring additional details may obtain free copies of descriptive literature on request.

Arnold, Hoffman Offers New Substantive Compound

A new, low-cost, substantive compound to fix direct dyes has been placed on the market by Arnold, Hoffman & Co., Inc. The new product is named Ahcofix C. Chief advantage claimed for Ahcofix C is that when added directly to urea-formaldehyde or melamine-formaldehyde resin baths, viscose rayons and cottons achieve washfast properties comparable to vat dyed finishes. Tests show that direct-dyed fabrics treated with this new substantive compound do not bleed, even when washed for 30 minutes in a .5 per cent soap solution at 140°.

Available in liquid form for instant solubility, Ahcofix C contains no copper salts. This is desirable because complete shade control becomes possible; the necessary copper salts being added in the exact quantities required. Cost-wise, this new Arnold, Hoffman product is said to offer several opportunities for production economies. Initial cost is lower because Ahcofix C is domestically produced and secondly, inexpensive direct dye processes can be used instead of more costly vat dye processes.

Hilton-Davis Enlarges Dyestuffs Laboratory

An enlarged dyestuffs application laboratory will be completed at Cincinnati, Ohio, in the near future by Hilton-Davis Chemical Co., according to Nelson S. Knaggs, vice-president in charge of sales. Standardizations of the dyestuffs line manufactured by the company are tested and controlled in the laboratory, under the direction of Richard VanVyven. Assisting in setting up additional laboratory equipment is George Nickles, a dyestuffs specialist, formerly of Charlotte, N. C., who has become associated with the company as technical salesman in the textile division.

Caribbean Blue is the name of a brilliant silk dye added to the line of textile dyes produced by Hilton-Davis Chemical Co. The firm is one of the few producers of the color in this country. Sometimes called setocyanine and having the color index number of 663, it was first produced for export to Japan and is now available generally in this country.

A. M. A. Presents Nine Booklets For Management

Nine booklets of interest to management have been announced by American Management Association, 330 West 42nd Street, New York City. They are: Personnel Series No. 121, "Personnel Functions and the Line Organization;" General Management Series No. 141, "Worker Morale and Productivity;" Production Series No. 178, "New Controls for Fixed and Variable Costs;" No. 180, "Administrative and Statistical Techniques of Quality Control;" No. 182, "The Basis of Production Planning;" No. 183, "Building Worker Interest in Production Problems;" No. 184, "Organizational Teamwork in Production;" Packaging Series No. 26, "A Primer on Basic Types of Shipping Containers and Interior Packing Pieces;" and No. 25, "Cost Controls for Packing, Shipping and Warehousing."

Minneapolis-Honeywell Regulator Co., Belfield Valve Division, has made available to the industry its Bulletin No. 47-1 on regulating valves, for the purpose of acquainting users in general with the merits in the design of the FB valve, which is used in many applications in the process industries.

Serving The Textile Industry

GOSSETT MACHINE WORKS, Inc.

By DAVID CLARK

IN 1927, B. W. Gossett decided to open a shop on North Marietta Street Extension in Gastonia, N. C., for repairing spindles and flyers. His father, A. B. Gossett, had been with the Draper Corp. of Hopedale, Mass., for many years as a loom erector, and B. W. Gossett, working in various cotton mills, had become a loom fixer.

Strangely enough, although his work in the mills had been in the weave room, B. W. Gossett decided to engage in the repairing of card room equipment such as roving spindles and flyers.

Mr. Gossett began in a little shop on North Marietta Street Extension with only himself and one helper, but today he has a very modern machine shop on West Franklin Avenue, which employs 52 men, most of them skilled machinists.

After getting to the plant, we asked Mr. Gossett and E. C. Mason, sales manager, to tell us about the early work of Gossett Machine Works and its gradual but steady development. At first the firm repaired only roving spindles and flyers, but now it does a large business in repairing and manufacturing fluted rolls as well as spinning, spooler and twister spindles.

Although the South is Gossett's largest market, the firm also does a substantial business in New England and Mexico. It specializes in the manufacture of spindle whorls and in repairing or making new trumpets for drawing frames and cards. The firm manufactures very high quality fluted drawing rolls under certain processes which have been developed. Gossett manufactures every part of a drawing frame.

Exterior view of the Gossett Machine Works plant.

N. C. Collection UNC-CH Library

Every time I come in contact with one of the many Gaston County men who are now manufacturing or repairing textile machinery parts, I am amazed at the knowledge which they have acquired of metals and metallizing and their ability to process and polish many types of metals. Very few of them have had a college education or an opportunity to study chemical engineering but I honestly believe that they know more about metals than many of the old textile machinery manufacturers in New England.

B. W. Gossett was no exception, and he told us about a metal he was using for the manufacture of card and drawing frame trumpets and which makes them almost impervious to wear and has multiplied their life several times.

Gossett Machine makes roller bearing shells for drawing frames which are so carefully balanced that there is not a difference of two-thousands of an inch on each side of center. Collars and flutes and necks are made with a tolerance of one-half of one thousandth.

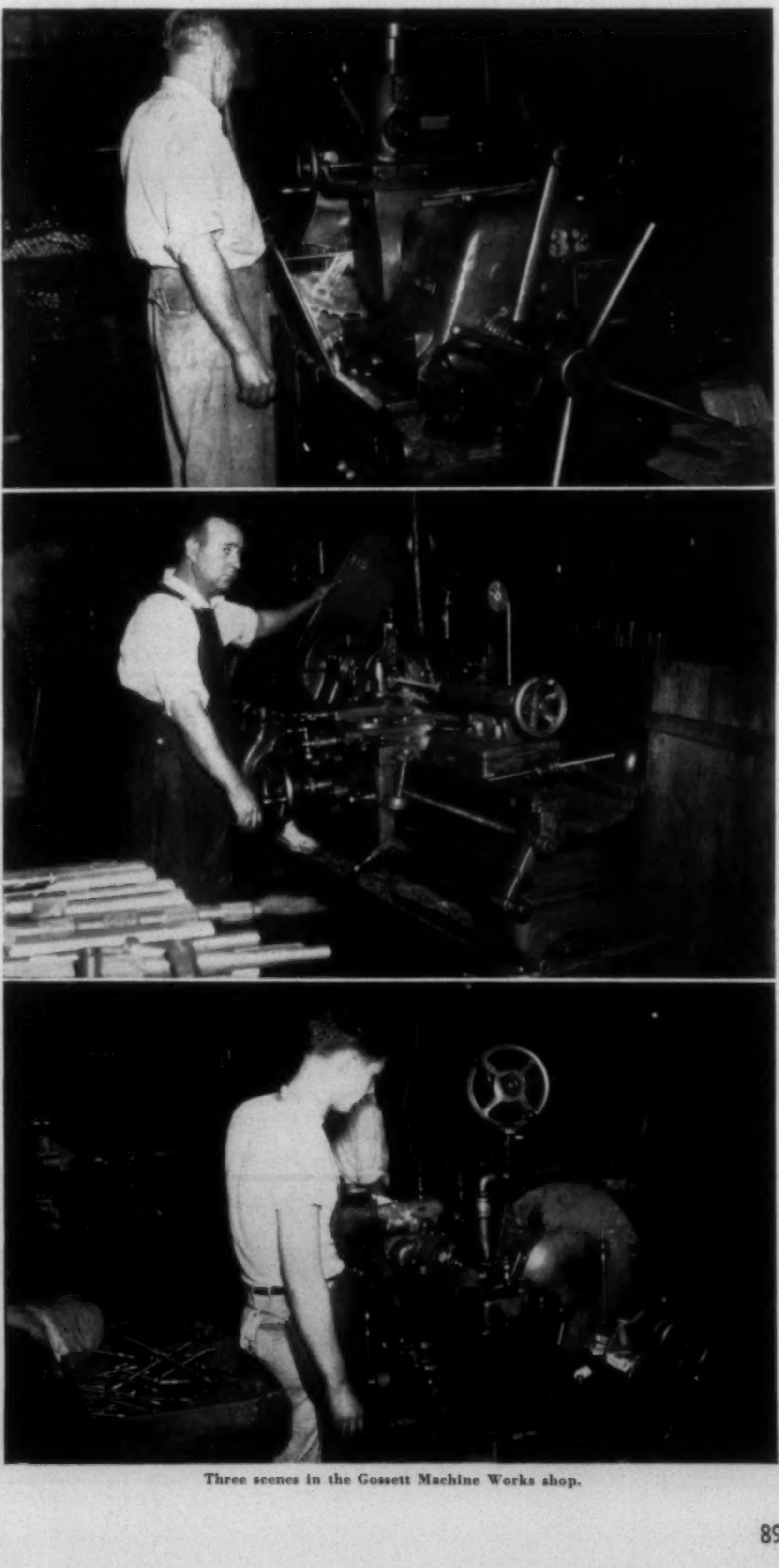
Gossett Machine Works is probably the only shop in the South manufacturing spinning and twister bases.

After our talk with Mr. Gossett, Mr. Mason showed us one of their very modern and very efficient machine shops. The first workers we watched were the men straightening spindles. Straightening requires experience and skill and Gossett Machine Works has developed a process of its own which insures accuracy. Then we watched a machinist grinding spindles. At one place we saw one machine that cuts flutes on four drawing rolls at one time and another that cuts flutes on eight rolls.

We saw a very large number of large whorls being processed and we were told that they were for tire fabric twisters. They were also manufacturing a large number of twister rolls and had just begun the manufacture of some fancies for cards operating on nylon staple.

Mr. Mason said that they had not previously manufactured fancies but did so because they were needed by a mill which had been a good customer and was just beginning to spin nylon yarns.

Leaving the shop, we stopped at the office to congratulate B. W. Gossett upon the high type of work his shop was doing and for having developed such a fine enterprise from such a small beginning.



Three scenes in the Gossett Machine Works shop.

HAVE YOU MOVED?

If you put off notifying us of your change in address it is possible that you will miss two copies of TEXTILE BULLETIN.

Use the form below to tell us when you move or plan to move.

Please PRINT address on envelope as TEXTILE BULLETIN has been reaching you.

Now give us the new address

Circulation Department
TEXTILE BULLETIN
P. O. Box 1225
Charlotte 1, No. Car.

Rayon Shipments For July Are Listed

Rayon shipments in July totaling 74,100,000 pounds were 10½ per cent greater than in June, but 21½ per cent under deliveries in July, 1948, according to the *Rayon Organon,* monthly publication of the Textile Economics Bureau, Inc. The gain from June to July was made in spite of mill shutdowns for employee vacations of two or more weeks in the latter month. Shipments of rayon yarn and staple in the first seven months of 1949 totaled 486,500,000 pounds, a decline of 23 per cent from the corresponding period in 1948. The *Organon* notes, however, that July shipments were at the average monthly 1946-1947 rate.

Rayon filament yarn shipments in July totaled 60,700,000 pounds, eight per cent above the previous month and 16 per cent under July, 1948. Filament shipments in July were made up of 41,900,000 pounds of viscose+cupra yarn and 18,800,000 pounds of acetate yarn. Of the viscose+cupra total, high tenacity viscose amounted to 25,100,000 pounds while the intermediate+regular yarn deliveries amounted to 16,800,000 pounds. In the seven-month period, total viscose+cupra shipments showed a loss of 9½ per cent from the same period last year; high tenacity viscose shipments were up 15 per cent; intermediate+regular tenacity deliveries were off 30 per cent; and acetate yarn was off 24½ per cent.

July staple plus tow shipments amounted to 13,400,000 pounds (8,100,000 pounds of viscose and 5,300,000 pounds of acetate) and were up 23 per cent compared with June, but 40 per cent below July, 1948. Staple and tow shipments for the first seven months totaled 78,600,000 pounds, a decline of 49½ per cent from the January-July period in 1948. Rayon yarn and staple stocks in the hands of producers at the end of July amounted to 64,200,000 pounds composed of 32,300,000 pounds of viscose+cupra filament yarn, 16,000,000 pounds of acetate filament yarn and 15,900,000 pounds of staple.

Significant changes in production were evident in the second quarter, the *Organon* points out in an analysis of rayon output. Production of yarn and staple in the April-June period totaled 204,900,000 pounds, a decline of 24 per cent from the previous quarter. Total domestic output in the second quarter was down 29 per cent from the all-time quarterly high registered in the last three months of 1948 and was 27 per cent less than the second quarter of last year.

Total rayon output in the first six months of 1949 totaled 475,400,000 pounds. While this figure represented a decline of 13 per cent from the corresponding period in 1948, it exceeded the output during the first half of 1947 and was more than the production for the entire year of 1940. Rayon filament yarn output in the second quarter totaled 176,600,000 pounds, 19 per cent under the previous quarter and 16 per cent below the corresponding period in 1948. For the first six months of the year, filament yarn production by all processes of manufacture totaled 394,700,000 pounds, 4½ per cent below the January-June, 1948 period.

While viscose+cupra yarn production in the second quarter was off ten per cent from the previous quarter and down only seven per cent from April-June, 1948, a divergent trend made itself apparent in the group total. High tenacity viscose yarn, used mainly in the manufacture of tires, was turned out to the extent of 74,500,000 pounds in the second quarter and attained a new quarterly record. Output of high tenacity viscose showed an increase of six per cent over the first quarter of 1949 and 18 per cent more than the second quarter of 1948.

Contrasted with the increase in high tenacity yarn, there was a substantial decline in intermediate+regular tenacity viscose textile yarn output. Second quarter production of 55,800,000 pounds was 25 per cent under the first quarter and 27 per cent less than the second quarter of 1948. Reduced output of acetate filament yarn was also reflected in the lighter manufacturing schedule. Second quarter production amounted to 46,300,000 pounds, a loss of 37 per cent from the first quarter and 35½ per cent from the corresponding period in 1948.

Largest production curtailment was evident in staple output, the *Organon* points out. During the first half of the year a total of 80,700,000 pounds were produced, a decline of 40 per cent compared with the first six months of 1948, when the highest staple production for any six-month period was recorded. Production of rayon staple dropped heavily in the second quarter when a 46 per cent decline from the previous quarter was registered. Output in that quarter amounted to 28,300,000 pounds, 58 per cent less than in

CHROMIUM PLATED
Lease Rods and Split Rods (For Your Slashers)

The extremely low coefficient of friction is the secret of chromium plated rods' amazing wear resistance. Yarn contacting the lease rods and split rod guides without chafing

SUPER-SMOOTH + WEAR RESISTING + RUST-RESISTING

WE CAN GRIND AND POLISH OUT CUT MARKS ON YOUR OLD RODS AND CHROMIUM PLATE

GREENSBORO LOOM REED COMPANY, INC. GREENSBORO, N. C.

the second quarter of 1948. Staple fiber output fell to the lowest point since 1941. Viscose staple and tow production totaling 20,300,000 pounds was 51 per cent below the previous quarter and 55 per cent under the second quarter of 1948. Acetate staple, faring almost as badly, was down to a figure of 8,000,000 pounds, being 27 per cent below the first quarter and 64 per cent under the second quarter of 1948.

Shipments of rayon filament yarn continued to lag behind production in the second quarter, according to the *Organon*. Total filament yarn deliveries in the quarter amounting to 158,900,000 pounds were 18½ per cent under the first quarter and 25 per cent less than the second quarter of 1948. Producers' stocks of filament yarn rose from 32,900,000 pounds at the end of March to 50,400,000 pounds at the end of June. The rise in stocks, however, was halted during June when only 200,000 pounds were added to producers' inventories.

Total rayon filament yarn deliveries in the first half of 1949 amounted to 353,900,000 pounds, a decline of 14½ per cent from the first half of 1948. During the second quarter deliveries to the textile trades amounted to 84,200,000 pounds, a decline of 32 per cent from the previous quarter and 42½ per cent under the second quarter of last year. Deliveries of textile yarn for the first half of the year amounted to 208,300,000 pounds, 27 per cent under the corresponding period in 1948.

Compared to the first quarter the following changes in yarn deliveries by trades was registered in the second quarter: hosiery —53 per cent; circular knitting —34 per cent; warp knitting —32½ per cent; broad weaving —31 per cent; narrow weaving—41 per cent; and miscellaneous uses —28 per cent. On a half-year basis, the changes in shipments to trades compared to the January-June period of 1948 was as follows: hosiery —68 per cent; circular knitting —29½ per cent; warp knitting —42 per cent; broad weaving —23½ per cent; narrow weaving —37 per cent; and miscellaneous uses —15 per cent.

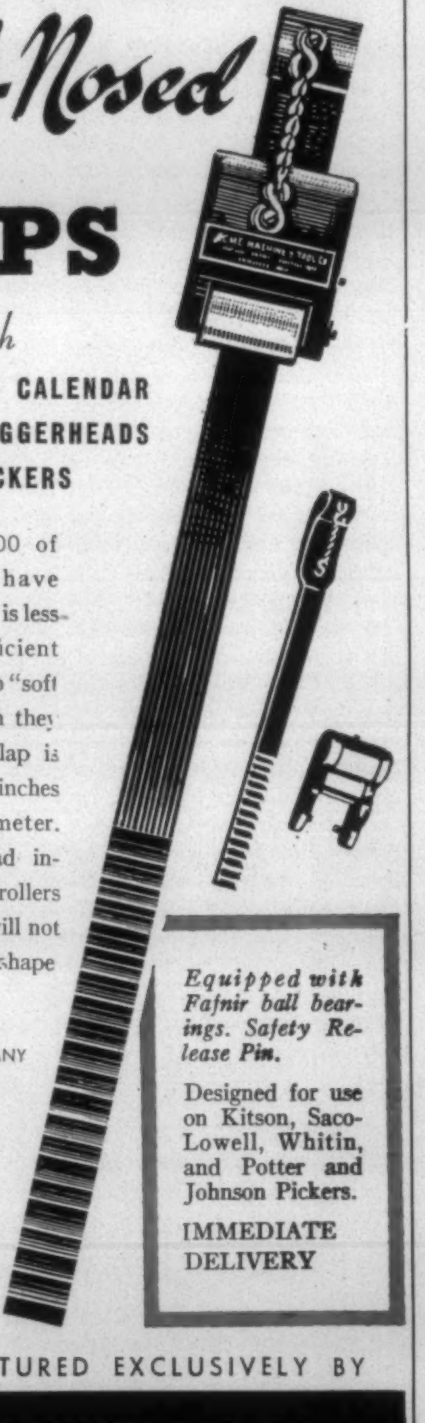
Vote To Dissolve Cotton-Textile Institute

The board of directors of the Cotton-Textile Institute, Inc., at a meeting Aug. 10 took affirmative action looking to the dissolution of the Cotton-Textile Institute and the formation of a new association to be known as the American Cotton Manufacturers Institute, Inc. This action is conditioned upon similar action expected to be taken by the board of governors of the American Cotton Manufacturers Association at a meeting later this month in Charlotte, N. C.

The action of the boards of these two associations does not become final until membership approval of the two associations has been obtained through meetings which will probably be held within the next few weeks.

The replacement of the Cotton-Textile Institute and the American Cotton Manufacturers Association by a single new

J. N. PEASE & COMPANY
Industrial Engineers
119½ E. FIFTH ST. CHARLOTTE, N. C.


ACME MACHINE & TOOL CO.

STOP
Soft-Nosed
LAPS
with
ROCKERHEAD CALENDAR RACKS OR LOGGERHEADS FOR PICKERS

More than 1,000 of these devices have proved that there is less waste, more efficient production and no "soft nosed laps" when they are used. Each lap is firm, being 2 to 4 inches smaller in diameter. Self-aligning head insures seating of rollers on lap pins and will not wear rollers cone shape

NO OTHER COMPANY IS LICENSED TO MANUFACTURE THIS DEVICE

Patent No. 2,018,063

Equipped with Fafnir ball bearings. Safety Release Pin.

Designed for use on Kitson, Saco-Lowell, Whitin, and Potter and Johnson Pickers.

IMMEDIATE DELIVERY

MANUFACTURED EXCLUSIVELY BY
ACME MACHINE & TOOL CO.
2601 Wilkinson Blvd. — Tel. 4-5633 — Charlotte, N. C.

organization will accomplish the industry unification that has long been sought. Upon its establishment all industry-wide problems and activities will be centered within one organization. In commenting upon this proposed unification, Dr. C. T. Murchison, president of the Cotton-Textile Institute, characterized it as one of the most constructive steps that has ever been undertaken by the cotton manufacturing industry.

$16,150 Necessary To Create Textile Job

To set up a job in the cotton textile industry today would require an initial capital investment of $16,150 for the necessary buildings, machinery, inventory, raw material and working capital, says the Textile Information Service. This figure, the Information Service explains, is reached in an analysis made by Ralph E. Loper Co., industrial engineering firm which specializes in textile cost service. The $16,150 compares with a similar analysis made by this engineering firm in 1936 when it was estimated that a capital investment of $4,402 was needed to create a cotton textile job.

A breakdown of the total capital required shows $4,800 needed for buildings, compared with $1,074 in 1936; for machinery $8,600 versus $2,146 in 1936; $2,750 for working capital against $1,182 in 1936. At today's costs, total initial capital investment required is 267 per cent more than was necessary in 1936, the last previous year for which comparable figures are available. The new study is based on industry-wide estimates and 2½ shifts averaging 100 hours of work per week.

In detailing results of the study, Loper cost experts noted that architects and mill engineers, in planning modern mill constructions, now provide more in the way of improved employee working conditions than the constructors thought necessary prior to the last World War. Most new textile building plans now provide for one story buildings, windowless walls, air conditioning, improved toilet and rest room facilities, improved inside wall finish, wider alleys, better lighting and numerous other improvements. Under these conditions, new buildings cost an average of $7.50 to $11 per square foot as compared with $3 to $4 in 1936.

In estimating the investment necessary for machinery, the Loper engineers contemplated the latest type automatic machinery at current prices in all instances and included the latest auxiliary equipment for maximum efficiency and production per employee.

New cotton cards, the study disclosed, today are priced at $3,600 to $3,800 with the latest attachments as compared with about $1,000 in 1936. New spinning machinery now costs about $22 to $27 per spindle installed as against about $10 in 1936. Plain high-speed automatic 40-inch looms are now priced at about $900 to $1,000 including installation as compared with $500 to $600 in 1936. In estimating the average investment of $8,600 required for machinery, it was noted that the new or latest type equipment available today will require a few less employees per unit of machinery as compared with the latest equipment offered the industry in 1936.

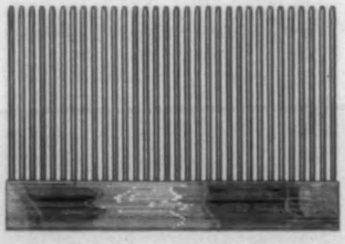
Included in the estimate necessary for working capital was provision for a minimum inventory, cash in bank, receivables, etc., for a going company. Cotton was taken at an average of 34 cents per pound in the bale delivered to the mills. Cotton prices vary, of course, considerably by type of products, mills, etc., but the study noted that an average of 34 cents was believed reasonably for the purpose intended. An average of about three months' supply of cotton on hand was used.

Inventory of yarn or cloth was estimated at the equivalent of 30 days production and stock in process was figured at a minimum amount necessary for efficient operations. Accounts receivable, cash, etc., were estimated on a conservative basis and no extra amounts were included to cover contingencies. Total average working capital necessary was established at $2,750 per job on a 2½-shift basis.

A. M. A. Personnel Conference Scheduled

More than 1,500 personnel executives from all over the United States will gather at the Waldorf-Astoria Hotel in New York City, Sept. 26-28, to take inventory of present personnel practices and to study new methods and developments in personnel management and labor relations, the American Management Association announced recently. Lawrence A. Appley, A. M. A. president, said that "personnel management today is engaged in a thoughtful and rigorous self-inventory of its objectives, policies, methods and effectiveness." He said that the seven sessions of the conference would be devoted to assisting management through a discussion of current trends, new developments and specific problems of the next few months.

The program is being arranged by John S. Bugas, A. M. A. personnel vice-president and vice-president in charge of industrial relations for Ford Motor Co. Among topics to be discussed at the A. M. A. personnel division meeting,



POSITIVE EXPANSION
COMB SECTIONS

We can furnish new comb sections promptly of any count and with hard steel or stainless steel pins any length.

Hard chromium plated pins are recommended.

GREENSBORO LOOM REED COMPANY, INC.
GREENSBORO, NORTH CAROLINA

N. C. Collection D. H. Hill Library

Mr. Bugas said, will be whether management is overlooking the individual approach to employees in favor of a collectivist approach, pensions and other issues in collective bargaining, practical applications of psychiatry to business problems, cost reduction through improved wage administration, aptitude testing, preventative medicine and other personnel practices.

Also the problems created by fluctuating production levels, executive development and trends in the employment of minority groups, foremen relationships and the outlook for future wage levels and benefits. Among personnel executives assisting Mr. Bugas in planning the conference are: Garret L. Bergen, divisional vice-president and personnel manager, Marshall Field & Co., Chicago; E. M. Cushing, director of industrial relations, United States Rubber Co., New York; Frank Evans, director of service department, E. I. du Pont de Nemours, Inc., Wilmington; J. Ward Keener, vice-president, B. F. Goodrich Co., Akron; and George W. Taylor, Wharton School of Finance and Commerce, University of Pennsylvania.

Schedule Industrial Vision Congress

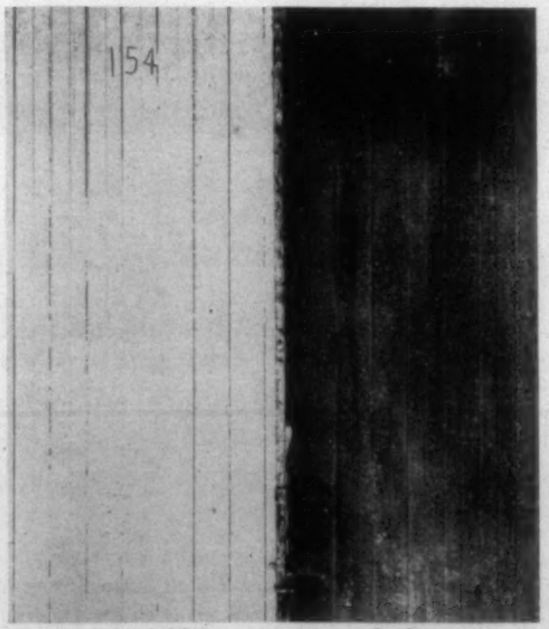
As a result of today's buyer's market, keen competition is leading management to consider all available means of raising quality and quantity of production, reducing spoilage, and loss of man-hours through absenteeism, employee turnover and accidents. In such an atmosphere, scientific evaluation of abilities and physical qualifications has come to the forefront as a means toward achieving greater efficiency. Good vision is one factor which is commanding more attention as a means toward greater employee efficiency, morale and safety, since it has been found that 80 per cent of a person's actions are governed by what he sees. An industrial vision program has been found in many plants as the scientific solution for the problem of poor eyesight among employees. By this means, the visual condition is determined and, if faulty, is rectified. Workers are classified according to visual ability to meet production requirements of a particular job, and with vision fitted for his work, the employee is happier, more efficient, and can turn out more units under less strain.

In view of this discovery through scientific research and the subsequent practical application in industrial plants, the annual Southeastern Industrial Vision Congress was inaugurated last November under the co-sponsorship of the Georgia Institute of Technology's engineering extension division and the Georgia Optometric Association on the Tech campus in Atlanta. Plans for the second annual Industrial Vision Congress are now being made, with the 1949 event scheduled for the tentative dates of Nov. 6-8 on the Tech campus. On the basis of the outstanding success of the first meeting, when 175 persons from six Southeastern states attended, the 1949 congress will attract even more widespread interest.

Arrangements for the November meeting are now being made by a joint program committee from Georgia Tech and the association of Georgia optometrists, with assistance of an advisory council composed of representatives from outstanding state, regional and national firms. A program which will feature nationally-known specialists in industrial and business vision, color dynamics, and illumination is

Here's Proof . . . IN BLACK AND WHITE . . . . *that*

GILMAN'S GIL-LITE MILLWHITE No. 154 Stands Up Longer !



Gilman's Gil-lite Mill White No. 154

Ordinary Mill White

This recent unretouched photograph (left) shows a section of a mill ceiling painted two years ago with GILMAN'S GIL-LITE MILLWHITE No. 154. The section on the right was painted at the same time with an ordinary Mill White.

IS *YOUR* MILL DUE *FOR* A MILDEW TREATMENT?

Do the job with

GILMAN'S

GIL-LITE MILLWHITE No. 154

. . . and watch it do a job for *YOU!*

For further information, write to

GILMAN PAINT & VARNISH CO.

Manufacturers Chattanooga, Tenn.

or

OLNEY PAINT CO., SPARTANBURG, S. C.

Distributors for Virginia and the Carolinas

planned. Dr. Walker H. Matthews of Athens, Ga., is general chairman of the 1949 event.

So widely heralded was the first program that several industrial and professional magazines printed the texts of some of the talks. Among those attracting the most attention was one by G. Luther Weibel, Jr., of Magnet Mills, Inc., Clinton, Tenn. Mr. Weibel cited benefits of his firm's program, as follows: (1) Of 85 employees who received professional eye care, an average of 74 per cent increased their earnings as a result; (2) an average of five per cent gain in earnings was noted, with the increase as high as 16 per cent in one department; (3) reduction of the training period by from 43 to 50 per cent through screening out of those "eyefully" unable to do a job, before employment; (4) 35 to 50 per cent less absenteeism; and (5) a remarkably lower turnover average, compared to the national average.

E. W. Howard of Fulton Bag & Cotton Mills, Atlanta, told those attending the first congress that "on piece rate workers we found an average difference in earnings, between those operators having adequate vision and those who were substandard, of 15 cents per hour." He also said that a study of safety revealed that those workers having low visual skills had more than twice the number of accidents as compared to the workers who possess adequate vision. Better employer-employee morale, increased feeling of job security, and lowered training costs were listed by Charles T. McNary, personnel director of Blue Bell, Inc., Greensboro, N. C., as what could be expected from a program.

Industrialists and business executives are invited to attend and especially those in Georgia, Florida, South Carolina, North Carolina, Tennessee and Alabama. Registration fee will be $10. In view of the hotel room shortage in Atlanta, those planning to attend are urged to register in advance. Those interested may obtain more information by writing to: Southeastern Industrial Vision Congress, Engineering Extension Division, Georgia Institute of Technology, 283 Ponce de Leon Ave., N.W., Atlanta, Ga.

Exposition Of Chemical Industries Slated

Exceptional interest is forecast for the 22nd Exposition of Chemical Industries because of the phenomenal growth of the allied enterprises figuring in the display and the rich promise of new disclosures in products and processes leading toward still further growth. Chemical engineering has led in revolutionizing many industries which are basically non-chemical in concept. It is improving on nature in many notable ways, and the pace of progress has not yet been perceptibly slowed down. The exposition will be held in Grand Central Palace, New York City, Nov. 28 to Dec. 3.

Added interest in the exposition is being stimulated by increasing competition and current trends in business. These have drawn special attention to the necessity of developing new economies in processing, which have engaged the attention of many of the exhibitors in preparing superior types of equipment for unveiling late in the year. In the same vein, there will be many displays featuring new materials of construction and the use of new and improved materials in more efficient machines. Capital expenditures for chemicals and oils for new plant and equipment have been estimated to represent one-fourth of the outlay by all indus-

Moretex 3S* Size

Moretex 3 S is a synthetic product which combines chemically with starches, gums, and gelatins to form a stable mix, which insures:

Uniform Sizing
Better Adhesion
Stronger Yarn
Smoother Yarn
Reduced Shedding

New
Different
Better

Easily Removed
Moretex 3 S Sizings are easily removed by medium temperature washings.

*Trade Mark applied for

Write for full information

Moreland Chemical Company Incorporated
Spartanburg, S.C.

☆

This
Publication
also
The KNITTER
and other
CLARK PUBLICATIONS
are Produced in Our Plant

WE SPECIALIZE IN MILL FORMS AND NUMBER
AMONG OUR CLIENTS MANY OF THE BEST
KNOWN TEXTILE MILLS IN THE SOUTH

Washburn Printing Co.

N. C. Collection UNC Library

tries during the current year, with one and a quarter billion going into new plants and equipment. That the march of the chemical industries will continue is assured by many long-range projects and the probable, but ever unpredictable advent of new industries and new segments of old ones, bred of deep seated research projects.

Among groups showing the greatest rate of growth in demand for chemical products are rayon, textiles and plastics. All of these will be studying new ways of cutting costs and improving products at the exposition, which will occupy all available space on the four floors of Grand Central Palace. Details of the display remain to be disclosed. Arrangements for the exposition follow the successful pattern of previous expositions, the first of which was held in 1915. The management is under the International Exposition Co., with permanent headquarters in Grand Central Palace, New York. Charles F. Roth is manager; E. K. Stevens, associate manager.

Plant Maintenance Show Set Jan. 16-19

A 15-man board of leading industrialists and editors to act as an advisory group for the first Plant Maintenance Show, which will be held in Cleveland, Ohio, Jan. 16-19, has been announced by Clapp and Poliak, Inc., the exposition management. L. C. Morrow, editor of *Factory Management and Maintenance,* will serve as general chairman of the advisory board as well as of the four-day conference on plant maintenance methods which will be held concurrently with the show.

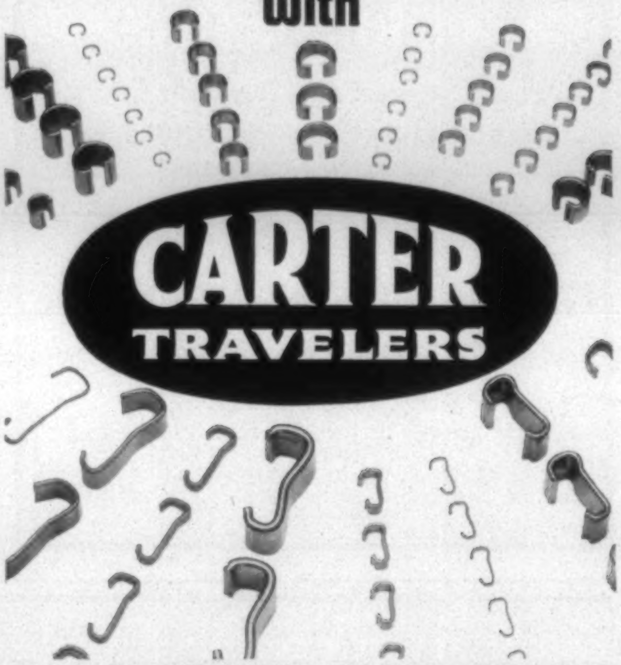
The board includes B. E. Boyd, vice-president in charge of manufacturing, Owens-Corning Fiberglas Corp., Toledo, Ohio; S. W. Corbin, industrial division, General Electric Co., Schenectady, N. Y.; L. P. Hanson, general sales manager, U. S. Air Conditioning Corp., Minneapolis, Minn.; J. R. Hertzler, vice-president and general sales manager, York (Pa.) Corp.; Orville C. Hognander, vice-president and sales manager, G. H. Tennant Co., Minneapolis, Minn.; John F. Kidde, president, Walter Kidde and Co., Inc., Belleville, N. J.; J. A. Meacham, manager of plant maintenance sales, Sherwin-Williams Co., Cleveland, Ohio; D. C. Miner, advertising manager, E. F. Houghton and Co., Philadelphia, Pa.; Don G. Mitchell, president, Sylvania Electric Products, Inc., New York; C. F. Radley, publicity director, Oakite Products, Inc., New York.

Some 50 companies already have reserved space and it is expected that several times that number will be represented when the show opens in January. The conference will be the first ever devoted exclusively to maintenance problems. There will be no charge for either exhibit or conference attendance. Advance registration cards and hotel information may be obtained from Clapp and Poliak, Inc., 341 Madison Avenue, New York 17, N. Y.

LYON METAL SHELVING, LOCKERS,
AND SHOP EQUIPMENT
MATERIAL HANDLING EQUIPMENT
TEXTILE LEATHERS—RAW HIDE PICKERS
BOBBINS, SPOOLS AND DROP WIRES

WILKIN & MATTHEWS
Manufacturer's Agents
215 Builders Bldg. Charlotte, N. C. Phone 5-2946

Increase Quality
Increase Quantity
with



You will find the superior materials and precision workmanship of CARTER TRAVELERS will make an important contribution to yarn *quality.* Every traveler in every box is absolutely uniform in weight, temper and shape. That means uniform spinning – stronger, finer yarns.

You will find, too, that CARTER TRAVELERS always give smooth running work and long, trouble-free performance with a minimum of wear on expensive rings. They keep spindles running faster, longer — they keep production profits up.

CARTER TRAVELER COMPANY
DIVISION OF
A. B. CARTER, INC.
GASTONIA N. C.

REPRESENTATIVES
C. E. HERRICK, 44 Franklin Street, PROVIDENCE, RHODE ISLAND
R. D. HUGHES SALES CO., 2201 Cedar Springs, DALLAS 1, TEXAS
HUGH WILLIAMS & CO., 47 Colborne St., TORONTO 1, CANADA

N. C. Collection UNC-CH Library

SELLING AGENTS
For Southern Cotton Goods

CURRAN & BARRY
320 BROADWAY
NEW YORK, N. Y.

NEISLER MILLS COMPANY, Inc.
Selling Agents
40 WORTH STREET, NEW YORK
BOSTON CHICAGO LOS ANGELES SAN FRANCISCO

JOSHUA L. BAILY & CO.
Established 1876

MERCHANDISING-CONVERTING
COTTON FABRICS.

BROAD DISTRIBUTION
IN THE PRINCIPAL
AMERICAN AND
FOREIGN MARKETS

40 WORTH STREET
NEW YORK 13, N. Y.

Great Contraction In Mill Margins

The decrease in the price of cotton goods since April, 1948, has been out of all proportion to the reduction in the price of raw cotton and has been almost entirely at the expense of mill margins, the Cotton-Textile Institute stated in an analysis of market conditions issued recently. The contraction in mill margins, according to the institute, has been almost as great as that which occurred after the collapse of 1920 and the liquidation that followed. The survey points out that it is also significant that the length of time involved in the readjustment now ending approximates that of the post World War I period. The outstanding difference between the current situation and the post World War I period is the rigidity of raw cotton prices which makes impossible a repetition of the experience of the earlier period.

Raw cotton prices reached their low point in September, 1948, and have since recovered about a third of the decline and are now only about 12 per cent below the 1948 peak. Yet more than one-half of the decrease in cotton goods prices, according to the institute, occurred during the period when raw cotton prices were rising. The institute stated that wage rates have not declined and labor costs have been effected only by the elimination of the premium wage third shift. It added that there is little likelihood of any reduction in either labor or other manufacturing costs.

The survey states: "As a consequence of the recent buyer caution in the placing of advance orders for cotton textiles and cotton textile products, the contraction of cotton mill activity since the peak of 1948 is unprecedented in the history of the industry for periods of generally prosperous business conditions. Since January, 1948, cotton mill activity has dropped from 139 per cent of capacity to 93.8 per cent, a decrease of more than 32 per cent. This decrease is almost as large as the contraction which occurred after the peak of 1937, when the economy as a whole experienced a sharp setback in activity, income and employment.

"As a result of the quick response to the lack of advance orders and the elimination of four million spindles since 1937, the industry has avoided the customary concomitant of low market activity—the accumulation of excessive mill stocks. Mill reports to the institute indicate that stocks on hand are at an unusually low level and that mills will find it difficult, if not impossible, to meet demands for quick delivery when the anticipated improvement in Fall business occurs. The elimination of spindleage has greatly reduced the flexibility of the industry and production can not be increased with the trigger-like action which was the industry's outstanding characteristic during most of the interwar period."

J. P. STEVENS & CO., Inc.
fabrics for diversified uses
1410 BROADWAY 44 LEONARD STREET
EMPIRE STATE BUILDING
NEW YORK

'49 Crop Set At 14,805,000 Bales

The Department of Agriculture has forecast this year's cotton crop at 14,805,000 bales of 500 pounds gross weight each as of Aug. 1. This estimate compares with 14,868,000 bales produced last year, and with a ten-year (1938-47) average of 11,306,000 bales.

Being larger than prospective market requirements, the crop foreshadowed a return to pre-war production controls for the 1950 crop. Supplementing this year's crop is a carryover surplus of about 5,600,000 bales from previous year's crops, a large part of which is held by the department under price support programs.

The yield of lint cotton per acre was indicated at 274.4 pounds, compared with 313.1 pounds last year and 254 for the ten-year average. The condition of the crop on Aug. 1 was reported at 80 per cent of normal compared with 85 a year ago and 75 for the ten-year average.

In an accompanying report, the Census Bureau said 297,843 running bales of this year's crop had been ginned prior to Aug. 1. This compared with 258,972 ginned to the same date last year and 193,638 year before last. The Aug. 1 condition of the crop, the indicated yield per acre and production, respectively, by cotton-producing states included: North Carolina, 79 per cent of normal; 337 pounds per acre and production 570,000 bales; South Carolina 72; 289 and 725,000.

July Consumption Reflects Vacation Period

The Bureau of the Census has reported that 455,106 bales of lint cotton were consumed during July, compared with 600,495 in June and 627,462 during July of last year. Consumption for the 12 months ended July 31 totaled 7,797,841 bales, compared with 9,354,392 for the corresponding period a year previous.

Cotton consumed last month included: in cotton-growing states, 415,957 bales, compared with 538,091 in June this year, and 561,521 in July of last year, and for the 12-month period 6,983,246 bales compared with 8,254,239 in the corresponding period a year ago; in the New England states 29,687 bales, compared with 49,670 and 53,619, and for the 12-month period 649,102 bales compared with 887,442.

Cotton spindles active during July numbered 19,012,000 compared with 19,464,000 during June this year, and 21,327,000 during July last year. The July, 1949, figures included: in cotton-growing states, 15,551,000 compared with 15,731,000 for June this year, and 16,832,000 for July

J. W. Valentine Co., Inc.

Selling Agents

40 Worth St. New York City

+ + +

Southern Representative

T. HOLT HAYWOOD

Wachovia Bank & Trust Co. Bldg. Winston-Salem, N. C.

ISELIN-JEFFERSON

COMPANY INCORPORATED

•

Sells for Mill Account Only

GREY GOODS • FINISHED GOODS

FABRICATED HOUSEHOLD ARTICLES

Nation-Wide • World-Wide

•

A Our GATEWAY Trademark Product

Head office: 90 WORTH STREET
NEW YORK 13, N. Y.
Hosiery Division
Empire State Building

A Great Textile Selling Organization

BOSTON • PHILADELPHIA • CLEVELAND • MEMPHIS • DALLAS • CHICAGO • ST. LOUIS
PHOENIX • LOS ANGELES • SAN FRANCISCO • TORONTO • ATLANTA • BALTIMORE

TEXTILE ENGINEERING

COTTON
RAYON
WOOL
SILK
NYLON

Plans and designs for all types of projects related to the textile industry. Appraisals, modernization studies, machinery layouts, air-conditioning, power and water filtration plants, and other phases of textile engineering.

ROBERT AND COMPANY ASSOCIATES

Architects and Engineers

ATLANTA

Air Engineering Co.
115 WEST CATHERINE STREET
PHONES: 4-7239—4-7230
Charlotte, N. C.

AIR CONDITIONING
HEATING
HUMIDIFYING

Engineers and Contractors

last year; and in the New England states 3,130,000 compared with 3,390,000 and 4,085,000.

Lint cotton on hand July 31 included 884,175 bales, compared with 1,471,908 a year ago (in consuming establishments), and 4,143,183 bales compared with 1,333,945 a year ago (in public storage and at compresses).

Egyptian Cotton Production Increase Seen

Egyptian cotton production may reach a record high of 1,975,000 bales (478 pounds) for the 1949-50 season, the National Cotton Council reported Aug. 4 in a special survey. Relaxation of planting restrictions and greater availability of fertilizer are credited with bringing about the increased production, the council report says.

Egyptian cotton production in the future, however, is not likely to expand significantly. In fact there is real question as to whether Egypt can maintain this rate. Approximately 18 per cent of the total cultivated land is now grown in cotton, as against a maximum of 20 per cent before the war. Further acreage expansion will depend upon installation of new and improved irrigation facilities to utilize a larger part of the Nile water, three-fourths of which at present empties into the sea. Greater water utilization appears possible and plans for new dams, reservoirs and barrages are being proposed in the Nile system extending from the head water region at Lake Victoria all the way to the mouth. A project is also being developed to drain marsh lands near the coast. This projected program would supply additional water to permit harvesting two or three crops on areas now in cultivation, while also adding some new acreage. Total expansion is expected to increase acreage planted for all crops by 25 per cent. This figure, however, is a maximum since in the past 25 years some new installations, improved facilities and reclamation projects have increased the area under crops by only about seven per cent. In any event, the major long-range improvements will be very costly and doubtless will take years to accomplish.

Egyptians are still concentrating on extra long staple cotton varieties which by U. S. standards staple at 1¼-inch and longer. While some improvements have been made in uppers which usually staple around 1⅛ inches, no interest has been evidenced in producing shorter staple length primarily since the longer staples carry higher premiums. They yield about as well as the shorter varieties and thus net the producer a higher return per acre, the council study says.

N. C. Collection UNC-CH Library

SOUTHERN SOURCES OF SUPPLY for Equipment, Parts, Material, Service

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information, service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

ABBOTT MACHINE CO., Wilton, N. H. Sou. Mgr.: L. S. Ligon, Greenville, S. C.; Sales Mgr.: S. R. Roane.

ACME STEEL CO., 2840 Archer Ave., Chicago 8, Ill. Southeastern Reprs., P. H. Webb., Mgr., 603 Stewart Ave., S.W., Atlanta, Ga.; Royal C. Camp, P. O. Box 2948, Greensboro, N. C.; C. A. Carrell, 603 Stewart Ave., S.W., Atlanta, Ga.; E. E. Drewry, 4179 Cliff Rd., Birmingham, Ala.; G. R. Easley, P. O. Box 1087, Greenville, S. C.; T. A. Kennedy, 34 W. Lock Lane, Richmond. Va.; W. G. Polley, Signal Mountain, Chattanooga, Tenn.; H. C. Sharpe, P. O. Box 2463, Orlando, Fla.; J. W. Webb, 603 Stewart Ave., S.W., Atlanta, Ga.; J. E. Tyler, 326 St. Paul Place, Baltimore, Md.; N. C. Brill, 407 Shell Bldg., Houston, Tex.; J. C. Brill, 309 Magazine St., New Orleans, La.; D. C. Jorgensen, 2140 Ingleside Ave., Apt. C-1, Phone Ivy 1673-J, Macon, Ga.; I. J. Gordon, 1910 Mae St., Orlando, Fla.; Marcus M. Brown, P. O. Box 205, Charlotte, N. C. The Philadelphia Office, 401 N. Broad St., Philadelphia, Pa.

AIR ENGINEERING CO., 115 W. Catherine St., Charlotte, N. C. Sou. Reprs.: E. J. Severs, C. H. White.

ALLEN CO., THE, 440 River Rd., New Bedford, Mass. Sou. Repr.: L. E. Wooten, Fort Mill, S. C.

AMERICAN CYANAMID CO., Industrial Chemicals Div., 30 Rockefeller Plaza, New York City. Sou. Office and Warehouse, Wilkinson Blvd., Charlotte, N. C., Hugh Puckett, Sou. District Mgr. Reprs.: John D. Hunter, Paul F. Haddock, R. S. Meade, Q. M. Rhodes, Charlotte Office; E. J. Adams, 1404 S. 22nd. St., Birmingham, Ala.; Jack B. Button, 1409 Garland Drive, Greensboro, N. C.; C. B. Suttle, Jr., 423 Clairmont Ave., Decatur, Ga.; C. P. Kirchen, 10 South St., Mobile, Ala.; T. O. McDonald, 531 Masonic Temple Bldg., New Orleans, La.

AMERICAN KEY PRODUCTS, INC., 15 Park Row, New York 7, N. Y. Sou. Repr.: Ira L. Griffin, P. O. Box 1576, Charlotte 1, N. C.

AMERICAN MOISTENING CO., Providence, R. I. Sou. Plants, Charlotte, N. C., and Atlanta, Ga.

AMERICAN TEXTILE SHEET METAL WORKS, Dallas, N. C. L. W. Ingle, owner.

AMERICAN VISCOSE CORP., 350 Fifth Ave., New York City. Sou. Office, Johnston Bldg., Charlotte, N. C., Henry K. Kelly, Mgr.

APEX MACHINE TOOL SUPPLY CO., P. O. Box 4121, 312 N. McDowell St., Charlotte 4, N. C. Paul Wichelhaus and H. P. Wichelhaus. Distributor for: Barber-Colman Co., Threadwell Tap & Die Co., Chicago Latrobe Twist Drill Co., Vascoloy-Ramet Corp., Cincinnati Lathe & Tool Co., Canedy-Otto Mfg. Co., Greaves Machine Tool Co., Smith-Mills Co., Grob Bros., The Skinner Chuck Co., Davis Keyseater Co., Bradford Machine Tool Co., Queen City Co., Tubular Micrometer Co., Gilbert S. Simonski, and others.

ARMOUR & CO., Armour Soap Works, 1355 West 31st St., Chicago 9, Ill. Dist. Divisional Offices: Armour & Co., P. O. Box 2664, Birmingham, Ala.; Armour & Co., 1816 Liberty Life Bldg., Charlotte, N. C.; Armour & Co., Jacksonville, Fla.; Armour & Co., Room 601, Chesapeake & Ohio Bldg., Huntington, W. Va.

ARNOLD, HOFFMAN & CO., INC., Providence, R. I. Sou. Headquarters, 2130 N. Tryon St., Charlotte, N. C., W. Chester Cobb, Sou. Sales Mgr. Technical Service Men: Dwight L. Turner, 160 N. Park St., Statesville, N. C., Phone 40-J; W. L. Mills, 2213 Friendly Rd., Greensboro, N. C., Phone 3-6282; Philip L. Lavoie, 19 Polk St., Sylacauga, Ala.; John H. Graham, P. O. Box 904, Greenville, S. C., Phone County 7614; Donald A. Barnes, 1010 Margaret Ave., Marietta, Ga., Phone 1335-M. Plant Mgr.: A. H. Noble, 2130 N. Tryon St., Charlotte 2, N. C. Warehouse and Sou. Mfg. Plant, 2130 N. Tryon St. Charlotte, N. C.

ASHWORTH BROS., INC., Fall River, Mass. Sou. Sales and Service Office and Repair Shop, 1201 S. Graham St., Charlotte, N. C., J. M. Reed, Sou. Mgr., T. F. Hart, Sales; Mfg. Plant, Sales Office and Repair Shop, Laurens Rd., Greenville, S. C., A. E. Johnson, Jr., Mgr.; Sales Office and Repair Shop, 357 Forrest Ave., N.E., Atlanta, Ga., J. E. Seacord, Jr., Mgr.; Texas Repr.: Textile Supply Co., Dallas, Tex.

ATWOOD DIVISION, Universal Winding Co., P. O. Box 1605, Providence, R. I. Sou. Offices, 819 Johnston Bldg., Charlotte, N. C.; Agent, Frederick Sails.

BAHNSON CO., THE, 1001 Marshall St., Winston-Salem, N. C.; 886 Drewery St., Atlanta, Ga.

BARBER-COLMAN CO., Rockford, Ill. Sou. Office, 31 W. McBee Ave., Greenville, S. C., J. H. Spencer, Mgr.

BARKLEY MACHINE WORKS, Gastonia, N. C.

BARNES TEXTILE ASSOCIATES, INC., 10 High St., Boston, Mass. Sou. Office, 318 Montgomery Bldg., Spartanburg, S. C.

BARRELED SUNLIGHT (U. S. Gutta Percha Paint Co.), Providence, R. I. C. L. Park, Sou. Dist. Mgr., 1640 N. Emory Rd., N.E., Atlanta, Ga.; Thomas C. Roggenkamp, 118 Altondale Ave., Charlotte, N. C.; L. K. Palmer, P. O. Box 1123, Spartanburg, S. C.; William M. Moore, 601 Pearl St., Lynchburg, Va.; Alfred G. Malone, P. O. Box 3763, Orlando, Fla.; P. R. Singletary, 3083 Piedmont Rd., N.E., Atlanta, Ga.

BEST & CO., INC., EDWARD H., Boston, Mass. Sou. Repr.: W. C. Hames. 185 Pinecrest Ave., Decatur, Ga., Phone Dearborn 5974; William J. Moore, 1 Pendleton St., Greenville, S. C., Phone Greenville 7646.

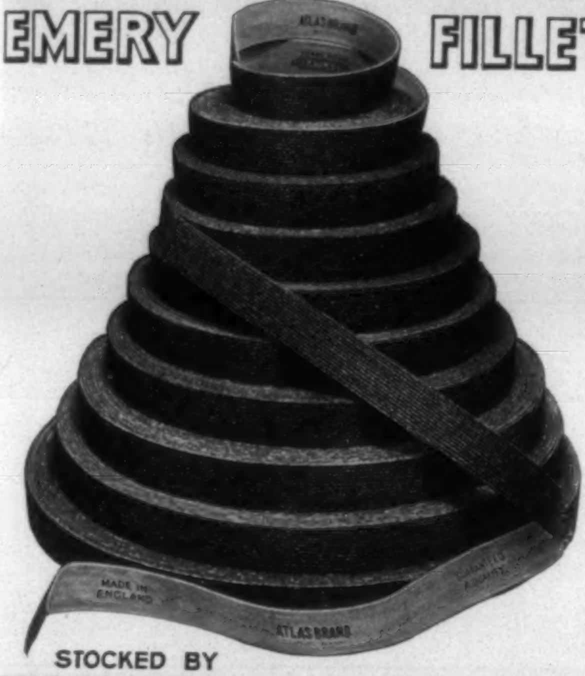
BLACKMAN-UHLER CO., 180 Ezell St., Spartanburg, S. C. W. B. Uhler, Paul C. Thomas; Rock Hill, S. C., P. C. Blackman, Jr., Box 1076.

BORNE SCRYMSER CO., Works and Offices, 632 S. Front St., Elizabeth, N. J. Warehouse, 815 W. Morehead St., Charlotte, N. C. Sou. Mgrs.: Willard E. Smith, Charlotte, N. C.; Chas. G. Kelley, Charlotte, N. C. Reprs.: John Ferguson, LaGrange, Ga.

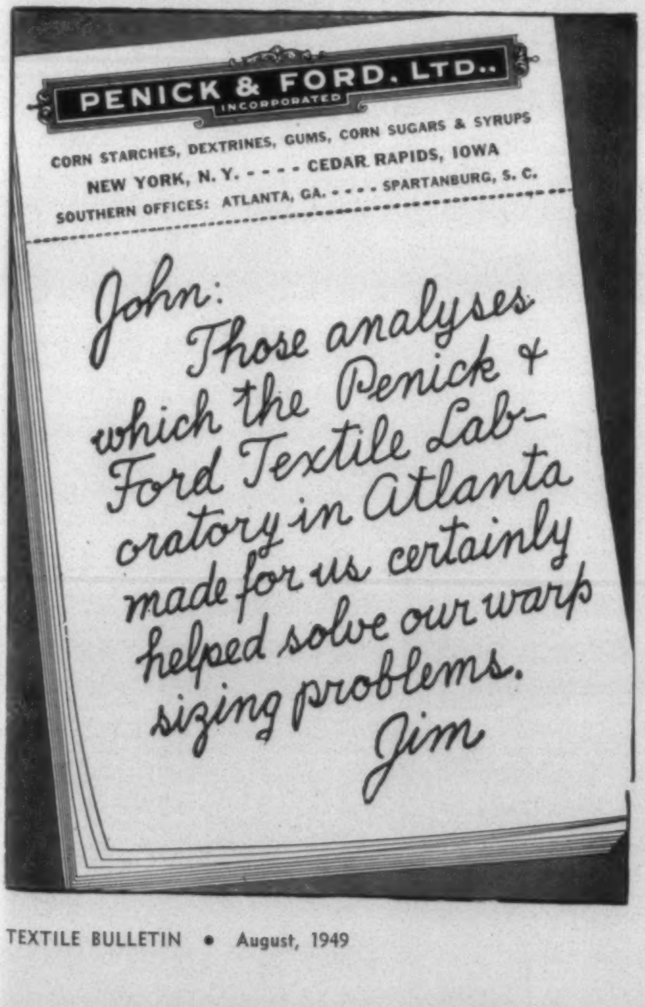
BROOKLYN FIBRE BROOM CO., Brooklyn, N. Y. Sou. Repr.: John Batson, Box 841, Greenville, S. C.

BULLARD CLARK CO., THE, Charlotte, N. C., and Danielson, Conn. E. H. Jacobs Southern Division Plant, Warehouse and Office, Box 3096, South Blvd., Charlotte, N. C. Sou. Exec., Edward Jacobs Bullard, Pres., and C. W. Cain,

DRONSFIELD'S PATENT
ATLAS BRAND
EMERY FILLET



STOCKED BY
THE PRINCIPAL MILL SUPPLY HOUSES
AND CARD MAKERS



PENICK & FORD, LTD.,
INCORPORATED
CORN STARCHES, DEXTRINES, GUMS, CORN SUGARS & SYRUPS
NEW YORK, N. Y. - - - - CEDAR RAPIDS, IOWA
SOUTHERN OFFICES: ATLANTA, GA. - - - - SPARTANBURG, S. C.

John:
Those analyses which the Penick & Ford Textile Laboratory in Atlanta made for us certainly helped solve our warp sizing problems.
Jim

The GASTONIA
MILL SUPPLY CO.

Industrial, Textile, Electrical and
Plumbing Supplies & Equipment

GAMISCO

GASTONIA, NORTH CAROLINA

TELEPHONE 5-0371 WORKS N. MARIETTA ST.

BARKLEY
MACHINE WORKS
MANUFACTURERS OF
TEXTILE MACHINERY
PARTS

GASTONIA, NORTH CAROLINA

THE NEW
1949
OFFICE EDITION of CLARK'S DIRECTORY
is now available
Price $3.00
Completely Revised
ORDER NOW

☆

CLARK
PUBLISHING CO.
P. O. Box 1225
Charlotte 1, N. C.

V.-Pres. and Gen. Mgr., both of Charlotte, N. C. Sou. Service Engineers: S. B. Henderson, Box 133, Greer, S. C.; L. L. Froneberger, Jr., 307 Elmwood Drive, Greensboro, N. C.; Ralph M. Briggs, Jr., 399 Lofton Rd., N.W., Atlanta, Ga.; Frank W. Beaver, Concord, N. C.

BURKART-SCHIER CHEMICAL CO., Chattanooga, Tenn. Plants: Chattanooga-Knoxville-Nashville. Sales and Service: C. A. Schier, A. S. Burkart, W. A. Bentel, W. J. Kelly, Jr., George S. McCarty, A. J. Kelly, J. A. Burkart, D. H. Gunther, T. A. Martin, O. G. Edwards, Roy Mann, Lawrence Newman, C. V. Day, Darden Newman, care of Burkart-Schier Chemical Co., Chattanooga, Tenn.; H. V. Wells, John T. Pigg, J. T. Hill, G. L. Vivrett, care of Burkart-Schier Chemical Co., Nashville, Tenn.; Phil H. Swann, George Garner, L. W. Maddux, D. L. Fielden, care of Burkart-Schier Chemical Co., Knoxville, Tenn.; James A. Brittain, 3526 Cliff Rd., Birmingham, Ala.; W. C. McElroy, 34 Sanders Ave., Lowell, Mass.

CAROLINA BELTING CO., 26 Augusta St., Greenville, S. C.

CAROLINA LOOM REED CO., 1000 S. Elm St., Greensboro, N. C.

CAROLINA MACHINERY CO., Steel Creek Rd., P. O. Box 1922, Charlotte, N. C.

CAROLINA REFRACTORIES CO., Hartsville, S. C.

CARTER TRAVELER CO., Gastonia, N. C., Division of A. B. Carter, Inc., Gastonia, N. C. Sou. Repr.: R. D. Hughes Sales Co., 1812 S. Main St., Dallas, Tex.

CHARLOTTE CHEMICAL LABORATORIES, INC., Charlotte, N. C. Peter S. Gilchrist, Jr.

CHARLOTTE LEATHER BELTING CO., 314 E. 6th St., Charlotte, N. C. Sales Reprs.: J. E. Beattie, P. O. Box 82, Greenville, S. C.; J. L. Harkey and P. L. Pindell, Charlotte Office.

CIBA CO., INC., Greenwich and Morton Sts., New York City. Sou. Offices and Warehouses, Charlotte, N. C.

CLINTON INDUSTRIES, INC., Clinton, Iowa. R. C. Rau, S. E. Mgr., Clinton Sales Co., Inc., 918 Mortgage Guarantee Bldg., Atlanta 3, Ga., Tel. Walnut 8998; Boyce L. Estes, 343 Mimosa Dr., Decatur, Ga. Sou. Reprs.: Grady Gilbert, Box 342, Phone 3192, Concord, N. C.; Jack M. Gibson, 900 Woodside Bldg., Phone 2-8022, Greenville, S. C. Stocks carried at Carolina Transfer & Storage Co., Charlotte, N. C.; Forrest Abbott Co., 117 E. Court St., Greenville, S. C.; Atlanta Service Warehouse, Atlanta, Ga.; Industrial Chemicals, Roanoke Rapids, N. C.

COCKER MACHINE & FOUNDRY CO., Gastonia, N. C.

COLE MFG. CO., R. D., Newnan, Ga.

COMMERCIAL FACTORS CORP., 2 Park Ave., New York, N. Y.

CORN PRODUCTS SALES CO., 17 Battery Place, New York City. Corn Products Sales Co., Southeastern Bldg., Greensboro, N. C., W. Rouse Joyner, Mgr.; Corn Products Sales Co., Woodside Bldg., Greenville, S. C., J. Allen Simpson, Mgr.; Corn Products Sales Co. (Mill and Paper Starch Div.), Hurt Bldg., Atlanta, Ga., L. Hawley Kelly, Mgr. Stocks carried at convenient points.

CRABB & CO., WILLIAM, 303 Third Ave., Newark, N. J.

CROMPTON & KNOWLES LOOM WORKS, Worcester, Mass. Sou. Offices and Plant: 1505 Hutchinson Ave., Charlotte, N. C.

CURTIS & MARBLE MACHINE CO., 72 Cambridge St., Worcester, Mass. Sou. Reprs.: Greenville, S. C., 1000 Woodside Bldg., W. F. Woodward, Tel. 2-7131; Dallas, Tex., O. T. Daniels, care Textile Supply Co.

DANIELS, INC., C. R., 4900 Wetheredsville Rd., Baltimore 16, Md. Sou. Office: C. R. Daniels, Inc., 121 East Third St., Charlotte, N. C. Baskets, Hampers, Trucks, Canvas Bags, Tarpaulins, and other canvas products.

DARY RING TRAVELER CO., Taunton, Mass. Sou. Reprs.: John E. Humphries, P. O. Box, 834, Greenville, S. C.; John H. O'Neill, P. O. Box 720, Atlanta, Ga.; James H. Carver, Box 22, Rutherfordton, N. C.; Crawford Rhymer, Box 2261, Greenville, S. C.

DAVIS MFG. CO., INC., FRANK, 1139 Main St., Pawtucket, R. I., U. S. A. Sou. Reprs.: John P. Batson, P. O. Box 841, Greenville, S. C.; R. E. L. Holt, Jr., P. O. Box 1474, Greensboro, N. C.

DAYTON RUBBER CO., THE, Dayton 1, Ohio. Textile Accessory Reprs.: J. O. Cole, P. O. Box 846, Greenville, S. C.; William L. Morgan, P. O. Box 846, Greenville, S. C.; Thomas W. Meighan, 1364 Middlesex Ave., N.E., Atlanta, Ga.; T. A. Sizemore, 525 Grove St., Salisbury, N. C.; E. L. Howell, P. O. Box 846, Greenville, S. C.; Kenneth K. Karns, P. O. Box 846, Greenville, S. C. V-Belt Reprs.: J. M. Hubbard, Dist. Mgr., The Dayton Rubber Co., 240 Spring St., N.W., Atlanta, Ga.; C. G. Crim, 412 N. Laurel Ave., Charlotte, N. C.; F. G. Tanner, 1549 Marianna St., Memphis, Tenn.; D. C. Greer, The Dayton Rubber Co., 240 Spring St., N.W., Atlanta, Ga.; K. C. Sparks, P. O. Box 2368, Birmingham, Ala.; W. E. Wayland, 515 Third Ave., North, Jacksonville Beach, Fla.; E. W. Watson, 516 Riverside Dr., Bossier City, La. Textile Jobbers. Greenville Textile Supply Co., Greenville Belting Co., Greenville, S. C.; Textile Mill Supply Co., Charlotte, N. C.; Odell Mill Supply Co., Greensboro, N. C.; Young & Vann Supply Co., Birmingham, Ala.; Industrial Supply, Inc., LaGrange, Ga.; Textile Supply Co., Dallas, Tex.

DICKSON & CO., W. K., 404½ S. Tryon St., Charlotte, N. C. W. K. Dickson.

DIXON LUBRICATING SADDLE CO., Bristol, R. I. Sou. Reprs.: R. E. L. Holt, Jr., and Associates, P. O. Box 1474, Greensboro, N. C.; J. W. Davis, Manufacturer's Agent, P. O. Box 745, Columbus, Ga.

DODENHOFF CO., INC., W. D., Greenville, S. C.

DOLGE CO., THE C. B., Westport, Conn. Sou. Reprs.: L. G. Strickland, R. F. D. 4, Durham, N. C.; George E. Bush, 2404 Belvedere Ave., Charlotte 2, N. C. New England: John H. Barlow, 43 Potters Ave., Providence, R. I.

DRAPER CORP., Hopedale, Mass. Rhode Island Warp Stop Equipment Branch, Pawtucket, R. I. Sou. Offices and Warehouses, Spartanburg, S. C., Clare H. Draper, Jr.; Atlanta, Ga., 242 Forsyth St., S.W. W. M. Mitchell.

DRONSFIELD BROS., Oldham, England; Boston, Mass.

DU PONT DE NEMOURS & CO., E. I., Organic Chemicals Dept., Main Office, Wilmington, Del. D. C. Newman, Mgr. Sou. District; Charlotte Office, 427 W. 4th St., R. D. Sloan, Mgr.; J. D. Sandridge, Asst. Mgr. Reprs.; E. P. Davidson, W. I. Pickens, M. D. Haney, Jr., H. H. Field, H. B. Constable, N. R. Vieira, W. R. Ivey, I. F. Chambers, B. S. Nicholson, J. T. Hasty, Jr.; T. R. Johnson, Greenville, S. C.; J. T. McGregor, Greensboro, N. C.; J. A. Kidd, High Point, N. C.; John L. Dabbs, Jr., Hickory, N. C. Atlanta Office, 1206 Spring St., N. W., A. B. Owens, Mgr. Reprs.: W. F. Crayton, Adam Fisher, Jr., J. H. Stradley, W. A. Howard, Gayle Rogers, J. L. Fesperman, Jr., John S. Gardner; C. H. Asbury, Chattanooga, Tenn.; M. S. Morrison, Jr., Knoxville, Tenn.; A. W. Pickens, Columbus, Ga.; J. E. Dempsey, Orlando, Fla.; J. A. Verhage, Memphis, Tenn.

EATON, PAUL B., 218 Johnston Bldg., Charlotte, N. C.

EMMONS LOOM HARNESS CO., Lawrence, Mass. Sou. Plant, 118½ W. Fourth St., Charlotte, N. C., George A. Field, Mgr.; Arthur W. Harris, Harris Mfg. Co., Agt., P. O. Box 1982, Phone Main 2643, Atlanta, Ga.; P. W. Coleman, Box 1393, Greenville, S. C., Phone: 2-3327; R. D. Hughes Sales Co., 2201 Cedar Springs, Dallas 1, Tex.

ENGINEERING SALES CO., 217 Builders' Bldg., Charlotte, N. C., and Allen Bldg., Greenville, S. C.; S. R. and V. G. Brookshire.

FERGUSON GEAR CO., Gastonia, N. C.

FISHER MFG. CO., Depot St., P. O. Box 244, Hartwell, Ga. J. Glenn Fisher, Mgr.; Robt. M. Matthews, Jr., Plant Mgr. Distributors: Carolina Supply Co., Greenville, S. C.; Shelton & Associates, Greensboro, N. C.; J. W. Davis, Mfgrs. Agt., Columbus, Ga.

FOSTER MACHINE CO., Westfield, Mass. Sou. Offices, 509 Johnston Bldg., Charlotte, N. C.

FRANKLIN PROCESS CO., Providence, R. I. Sou. Plants, Southern Franklin Process Co., Greenville, S. C.; Central Franklin Process Co., Chattanooga, Tenn.

GASTONIA COMBER NEEDLING CO., Gastonia, N. C.

GASTONIA MILL SUPPLY CO., Gastonia, N. C.

GASTONIA ROLLER, FLYER & SPINDLE CO., Linwood Ave. and Second St., Gastonia, N. C. Phone 1209.

GASTONIA TEXTILE SHEET METAL WORKS, INC., Gastonia, N. C.

GENERAL CHEMICAL CO., Division Allied Chemical & Dye Corp., 40 Rector St., New York, N. Y. Sou. Sales and Technical Service Offices: 45 Edgewood Ave., S.E., Atlanta, Ga.; 2000 Race St., Baltimore 30, Md.; 818 Tuckaseege Rd., P. O. Box 970, Charlotte 1, N. C.; 3909 Capitol Ave., Houston 3, Tex.

GENERAL COAL CO., 1217 Johnston Bldg., Charlotte 1, N. C. D. B. Smith, Sou. Sales Mgr.; F. B. Crusan, Asst. Sou. Sales Mgr. Reprs.: H. G. Thompson, Asheville, N. C.; Hugh D. Brower, Atlanta, Ga.; H. C. Mills, Jr., Raleigh, N. C.; Guy H. Sowards, Greenville, S C.; W. A. Counts, Res. Mgr., Bluefield, W. Va.; E. H. Chapman, Combustion Engineer, Charlotte, N. C.; J. E. Campbell, Combustion Engineer, Charlotte, N. C.

GENERAL DYESTUFF CORP., 435 Hudson St., New York City. Sou. Office and Warehouse, 2459 Wilkinson Blvd., Charlotte, N. C., S. H. Williams, Mgr.

GILMAN PAINT & VARNISH CO., Chattanooga, Tenn. Distributor: Olney Paint Co., P. O. Box 589, Spartanburg, S. C. Reprs.: R. B. Olney, Olney Paint Co., P. O. Box 589, Spartanburg, S. C.; C. Howard Dodson, P. O. Box 452, Greensboro, N. C.; J. M. Ison, P. O. Box 589, Spartanburg, S. C.; W. P. Dobson, P. O. Box 589, Spartanburg, S. C.

GOSSETT MACHINE WORKS, W. Franklin Ave., Gastonia, N. C.

GREENSBORO LOOM REED CO., Greensboro, N. C. Phone 5678. Geo. A. McFetters, Pres. and Mgr., Phone 2-0205; Raymond F. ("Dick") Coe, Phone 3-4193.

GREENVILLE BELTING CO., Greenville, S. C.

GRIFFIN & SON, IRA L., P. O. Box 1576, Charlotte 1, N. C.

GULF OIL CORP. OF PA., Pittsburgh, Pa. Div. Office. Atlanta, Ga. Reprs.: C. T. Timmons, Greenville, S. C.; W. G. Robertson, Jr., Spartanburg, S. C.; R. G. Burkhalter, Charlotte, N. C.; G. P. King, Jr., Augusta, Ga.; G. W. Burkhalter, Greensboro, N. C.; S. E. Owen, Jr., Hendersonville, N. C.; R. L. Winchell, Raleigh, N. C. Div. Offices, Boston, Mass.; New York, N. Y.; Philadelphia, Pa.; New Orleans, La.; Houston, Tex.; Louisville, Ky.; Toledo, Ohio.

HART PRODUCTS CORP., 1440 Broadway, New York 18, N. Y.

H & B AMERICAN MACHINE CO., Pawtucket, R. I. Sou. Offices, 815 The Citizens and Southern National Bank Bldg., Atlanta, Ga., J. C. Martin, Mgr.; Charlotte, N. C., Office, 1201 Johnston Bldg., Herman J. Jones, Div. Mgr.; J. T. Miller, Service Repr.

HENDERSON FOUNDRY & MACHINE CO. (Div. of Southern States Equipment Co.), Hampton, Ga.

HENLEY PAPER CO. (formerly Parker Paper Co.), Headquarters and Main Warehouse, High Point, N. C.; Warehouses and Sales Divisions: Charlotte, N. C., Asheville, N. C., Gastonia, N. C.

HERSEY, HENRY H., 44 Norwood Place, Greenville, S. C. Selling Agent for A. C. Lawrence Leather Co. and New England Bobbin & Shuttle Co.

HETHERINGTON & SONS, INC., JOHN, 72 Lincoln St., Boston 11, Mass. Sou. Repr.: Thomas M. Brockman, Jr., 236 W. Airline Ave., Gastonia, N. C.

HOUGHTON & CO., E. F., 303 Lehigh Ave., Philadelphia 33, Pa. Sou. Reprs.: W. H. Brinkley, Gen. Sales Mgr., Sou. Div. 825 W. Morehead St., Charlotte, N. C., Tel. 3-2916. Sou. Reprs.: L. L. Brooks, 506 Cedar Rock St. Pickens, S. C., Tel. 3041; J. W. Byrnes, 701 N. Jacinto St., Houston 2, Tex., Tel. Preston 7151; G. J. Reese, 546 McCallie Ave., Chattanooga, Tenn.; C. L. Elgert, 10 E. Lexington St., Baltimore 2, Md., Tel. Saratoga 2388; T. E. Hansen, Rt. No. 2, Box 157, Glen Allen, Va., Tel. 5-1620; J. J. Reilly, 2788 Peachtree Rd., N.E., Apt. 6-B, Atlanta, Ga., Tel. Cherokee 7660; F. P. Hunt, Secretarial Exchange, 902-904 Dermon Bldg., Memphis, Tenn., Tel. 37-9626; A. N. Jackson, 825 W. Morehead St., Charlotte, N. C., Tel. 3-2916; S. P. Schwoyer, P. O. Box 1507 or 302½ Otteray Drive, High Point, N. C., Tel. 3654; J. C. Mahaffey, Warp Size Specialist, 825 W. Morehead St., Charlotte, N. C.; J. D. Brown, 825 W. Morehead St., Charlotte, N. C.

HOUGHTON WOOL CO., THE, 258 Summer St., Phone Liberty 1875, Boston,

N. C. Collection UNC-CH Library

STEWART MACHINE CO., INC.

Manufacturers

QUALITY TEXTILE REPAIR PARTS

SPINNING & TWISTER BOLSTERS • RINGS & HOLDERS
LIFTING RODS & BUSHINGS

EXPERT SPINDLE REPAIR • MACHINE SHOP EQUIPMENT

Phone, Write or Wire

PHONE 3700-W1 • WILKINSON BOULEVARD • P O BOX 1161
GASTONIA, NORTH CAROLINA

WET PROCESSING AGENTS
BURK-SCHIER
FOR EVERY TEXTILE APPLICATION

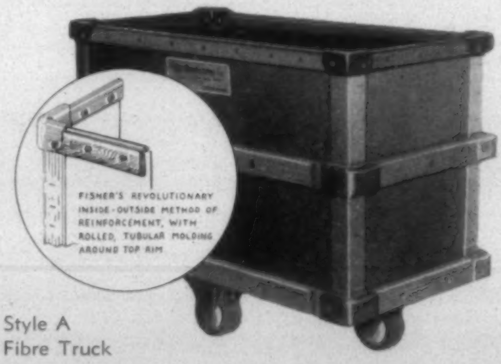
BURKART-SCHIER CHEMICAL CO.
CHATTANOOGA, TENNESSEE

MANUFACTURING CHEMISTS FOR THE TEXTILE INDUSTRY

FISHER *FUNCTIONAL*
TEXTILE TRUCKS

FOR EVERY MILL PURPOSE

Scientifically designed to avoid damage to machinery on contact, and ruggedly reinforced at points of greatest stress. Vulcanized Fibre with cured Oak Bands, and Steel Reinforced. Also made in Galvanized Steel, Aluminum, and Stainless Steel.


FISHER'S REVOLUTIONARY INSIDE-OUTSIDE METHOD OF REINFORCEMENT, WITH ROLLED, TUBULAR MOLDING AROUND TOP RIM

Style A
Fibre Truck

Write today for Free Illustrated Brochure showing complete range of styles.

Representatives

J. W. Davis
122 Dillingham St.
Columbus, Ga.

Carolina Supply Co.
35 Court St.
Greenville, S. C.

Shelton & Associates
P. O. Box 496
Greensboro, N. C.

FISHER MANUFACTURING CO.
MATERIALS HANDLING EQUIPMENT, TEXTILE
BOX 244 -- HARTWELL, GEORGIA

For spinning and twisting worsteds: also twisting silk, synthetic yarns and mixtures as well as the finer numbers of cotton.
For spinning and twisting wool; also twisting cotton and rayon (heavier nos.), worsteds and paper.

High speed **is not the only advantage of Eadie Rings**

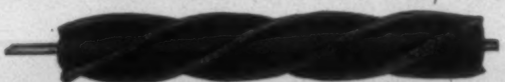
Plenty of DIAMOND FINISH Eadie lubricated rings are used to advantage on machinery which won't stand higher speeds. There are other important gains: improved yarn quality, less bad work, fewer ends down, much cleaner yarn, oil-free floors, much less oiling effort, greatly increased traveler life. Let's discuss it.

WHITINSVILLE (MASS.)
SPINNING RING CO.
DIAMOND FINISH
Makers of Spinning and Twister Rings since 1873

HEADQUARTERS
FOR
SIZING • PENETRANTS
SOFTENERS • ALKALIES
SHUTTLE DRESSING
"TWIST-SETTER" MACHINES

SEYDEL-WOOLLEY & CO.
TEXTILE CHEMICALS
748 RICE STREET • ATLANTA, GA.
SEYCO

PEGGED and GLUED BRISTLES Stay Put!



LONGER LIFE—Spiral card brushes, refilled the Gastonia way, last from 10 to 15 years, compared with 2 or 3 years when staples are used—for STAPLES WILL NOT STAY PUT IN SOFT WOOD. Gastonia first dips the bristles and fiber in glue, then they are permanently pegged in.

BETTER FINISH—To prevent lint from collecting on rolls, Gastonia paints them with high-grade bobbin enamel, which dries to a hard, glossy finish. **Brushes can be refilled and returned in two days. Freight is paid one way.**

J. T. HARRELL, PRES. AND MGR.

GASTONIA BRUSH COMPANY
Phone 1708 GASTONIA, N. C.

Mass. Sou. Repr.: Jas. E. Taylor, P. O. Box 2064, Phone 3-3692, Charlotte 1, N. C.

HOWARD BROS. MFG. CO., 44-46 Vine St., Worcester, Mass. Sou. Offices and Plants, 244 Forsyth St., S.W., Atlanta, Ga.; Guy L. Melchor, Sou. Agent; J. Floyd Childs, 219-223 S. Linwood St., Gastonia, N. C.; Carl M. Moore, Agent; Southwestern Repr., Russell A. Singleton Co., Inc., 718 Brown Bldg., Austin, Tex.

HUBINGER CO., THE, Keokuk, Iowa. Sales Repr.: Ira L. Griffin, P. O. Box 1576, Charlotte, N. C. Tel. 4-5306.

HUNT MACHINE WORKS, INC., 200 Academy St., Greenville, S. C.

HYSTER CO., Portland 8, Ore. Sou. Repr.: L. S. Teague Equipment Co., 921 Lynch Bldg., Jacksonville 2, Fla.

IDEAL MACHINE CO., Bessemer City, N. C., A. W. Kincaid, Mgr.

INDUSTRIAL AIR CO., Needham, Mass.

INDUSTRIAL SUPPLY CO., Clinton, S. C.

JACOBS SOUTHERN & NORTHERN DIV., E. J. (The Bullard Clark Co.), Charlotte, N. C., and Danielson, Conn. Sou. Plant, Warehouse and Office, P. O. Box 3096, South Blvd., Charlotte, N. C. Sou. Exec.: Edward Jacobs Bullard, Pres., and C. W. Cain, V.-Pres. and Gen. Mgr., both of Charlotte, N. C. Sou. Service Engineers: S. B. Henderson, Box 133, Greer, S. C.; L. L. Froneberger, Jr., 307 Elmwood Dr., Greensboro, N. C.; Ralph M. Briggs, Jr., 399 Lofton Rd., N.W., Atlanta, Ga.; Frank W. Beaver, Concord, N. C.

JENKINS METAL SHOPS, INC., Gastonia, N. C.

KEEVER STARCH CO., Columbus, O. Sou. Office, 1200 Woodside Bldg., Greenville, S. C. Sou. Warehouses: Greenville, S. C., Charlotte, N. C. Sou. Reprs.: C. C. Switzer, Greenville, S. C.; E. Hays Reynolds, Greenville, S. C.; Luke Castile, 924 Monticello Terrace, Charlotte 3, N. C.; F. M. Wallace, Homewood, Birmingham, Ala.

KIMMEL MACHINSRY CO., LEON, P. O. Box 1316, New Spartanburg Highway, Greenville, S. C.

LAMBETH ROPE CORP., New Bedford, Mass. Frank Burke, Phone 3-4287, Charlotte, N. C.; J. P. O'Leary, Phone 4082-M, Greenville, S. C.; Stuart E. Campbell, Phone 2753, Griffin, Ga.

LANDIS, INC., OLIVER D., 718 Queens Rd., Charlotte 7, N. C. Charles R. Ibach, Charlotte, N. C.

LAUREL SOAP MFG. CO., INC., 2607 E. Tioga St., Philadelphia, Pa. Sou. Repr.: A. Henry Gaede, P. O. Box 1083, Charlotte, N. C.

LEWIS MACHINERY CO., W. D., P. O. Box 826, Gastonia, N. C.

LOPER CO., RALPH E., 500 Woodside Bldg., Greenville, S. C. New England Office, Buffington Bldg., Fall River, Mass.

LUBRIPLATE DIVISION, FISKE BROS. REFINING CO., 129 Lockwood St., Newark 5, N. J. Sou. Repr.: J. Fred Welch, 1317 Lafayette Ave., Charlotte, N. C.; William F. Bloom, care Industrial Service Co., P. O. Box 9, Station E, Atlanta, Ga.; Leo A. DeJean, 850 Gladstone Blvd., Shreveport 38, La. Distributers: Tidewater Supply Co., Inc., Norfolk, Va.; Asheville, N. C.; Columbia, S. C.; Knoxville, Tenn.; Johnson City, Tenn.; Richmond, Va.; Roanoke, Va.; Industrial Service Co., 902 College Ave., Decatur, Ga.; Richmond Supply Co., Augusta, Ga.; Corbin Supply Co., Macon, Ga.; John D. Robinson Co., Savannah, Ga.; Georgia-Alabama Supply Co., Inc., West Point, Ga.; Noland Co., Inc., Chattanooga, Tenn.; Lewis Supply Co., Memphis, Tenn.; Electrical Machinery & Supply Co., Nashville, Tenn.; Turner Supply Co., Mobile, Ala.; Jefferson Brick Supply Co., Birmingham, Ala.; R. J. Tricon Co., New Orleans, La.

LUTTRELL & CO., C. E., Greenville, S. C.

MAGUIRE & CO., INC., JOHN P., 370 Fourth Ave., New York, N. Y.

MANHATTAN RUBBER MFG. DIVISION OF RAYBESTOS-MANHATTAN, INC., THE, Passiac, N. J. Factory: North Charleston, S. C. Sou. Distributors: Alabama—Teague Hdw. Co., Montgomery; Anniston Hdw. Co., Anniston; Long-Lewis Hdw. Co., Birmingham; Gadsden Hdw. Co., Gadsden. Georgia—American Mchy. Supply Co., Atlanta; Bibb Supply Co., Macon. Kentucky—Graft-Pelle Co., Louisville. North Carolina—Charlotte Supply Co., Charlotte; Dillon Supply Co., Raleigh, Durham and Rocky Mount; Kester Mchy. Co., Winston-Salem, High Point and Burlington. South Carolina—The Cameron & Barkley Co., Charleston; Carolina Supply Co., Greenville; Columbia Supply Co., Columbia; Montgomery & Crawford, Inc., Spartanburg; Sumter Mchy. Co., Sumter; Tennessee—Chattanooga Belt & Sup. Co., Chattanooga; Summers Hdw. & Sup. Co., Johnson City; Power Equipment Co., Knoxville; Buford Bros., Inc., Nashville; Lewis Supply Co., Memphis. Virginia—Industrial Supply Corp., Richmond.

MARQUETTE METAL PRODUCTS CO., THE, 1145 Galewood Drive, Cleveland 10, O. Sou. Reprs.: C. H. White, 1229 Pamilco Drive, Greensboro, N. C.; W. P. Russell, Box 778, Atlanta, Ga.; Byrd Miller, 908 Woodside Bldg., Greenville, S. C.

McKEE BELTING CO., 213 N. Third St., Philadelphia, Pa. Sou. Repr.: T. J. Digby, Jr., P. O. Box 244, Greer, S. C.

McKELVIE MACHINE CO., Gastonia, N. C. Henry McKelvie.

MEADOWS MFG. CO., P. O. Box 4354, Atlanta, Ga. N. C. Repr.: Walter S. Coleman, P. O. Box 722, Salisbury, N. C.; S. C. Repr.: James P. Coleman, P. O. Box 1351, Greenville, S. C.; Ga., Ala. and Tenn. Repr.: R. L. Holloway, P. O. Box 4334, Atlanta, Ga.

MEDLEY MFG. CO., 400—32nd St., Columbus, Ga. Phone 2-1695-6.

MEINHARD, GREEFF, & CO., 51 Madison Ave., New York, N. Y. Sou. Repr.: E. F. Skinner, Johnston Bldg., Charlotte 2, N. C.

MERROW MACHINE CO., THE, 8 Laurel St., Hartford, Conn. Hollister-Moreland Co., P. O. Box 721, Spartanburg, S. C.

MILL DEVICES CO., Gastonia, N. C. R. D. Hughes Sales Co., 1812 Main St., Dallas, Tex., Texas and Arkansas; Eastern Repr.: (including Canada) C. E. Herrick, 44 Franklin St., Providence, R. I.; European Repr.: Mellor, Bromley & Co., Ltd., Liecester, England.

MILLER, BYRD, Manufacturers' Agent, Woodside Bldg., Greenville, S. C.

MITCHAM & CO., N. Marietta St., P. O. Box 271, Gastonia, N. C.

MONARCH ELEVATOR & MACHINE CO., Greensboro, N. C. (Freight and Passenger Elevators). Service Branches: Charlotte, N. C.; Augusta, Ga.

MORELAND CHEMICAL CO., INC., Spartanburg, S. . Paul C. Thomas, Pres.-Treas.; J. W. Ivey, Vice-Pres. and Sales Mgr. Reprs.: J. J. Blake, K. T. Moore, T. J. Boyd, Spartanburg, S. C.; W E. Nash, Asheville, N. C.

NATIONAL ANILINE DIVISION, Allied Chemical & Dye Corp., Gen. Office, 40 Rector St., New York 6, N. Y. Julian T. Chase, Res. Mgr. Kenneth Mackenzie, Asst. to Res. Mgr., 201 W. First St., Charlotte, N. C. Salesmen: Wyss L. Barker, Harry L. Shinn, Geo. A. Artope and J. Reese Daniel, 201 W. First St., Charlotte, N. C.; C. J. Dulin and R. F. Morris, Jr., Jefferson Standard Bldg., Greensboro, N. C.; H. A. Rodgers and Chas. A. Spratt, 1202 James Bldg., Chattanooga 2, Tenn.; J. K. Boykin, American Savings Bank Bldg., Atlanta, Ga.; W. H. Jackson, 213 Columbus Interstate Bldg., Columbus, Ga.; A. Jones, Jr., 408 Cotton Exchange Bldg., New Orleans, La.; Henry A. Cathey, 403 E. Franklin St., Room 210, Richmond, Va.

NATIONAL RING TRAVELER CO., 354 Pine St., Pawtucket, R. I. Sou. Office and Warehouse, 131 W. First St., Charlotte, N. C. Gen. Mgr., L. E. Taylor, Pawtucket, R. I. Sou. Mgr., H. B. Askew, Charlotte, N. C. Sou. Reprs.: J. K. Sumner, P. O. Box 1607, Charlotte, N. C.; Donald C. Creech, P. O. Box 1723, High Point, N. C.; Frank S. Beacham, P. O. Box 281, Honea Path, S. C.; James B. Poteet, P. O. Box 221, Griffin, Ga.; W. Harry King, P. O. Box 272, Atlanta, Ga.

NEISLER MILLS CO., INC., 40 Worth St., New York, N. Y.

NEW ENGLAND BOBBIN & SHUTTLE CO., Nashua, N. H. Sou. Reprs.: Charlotte Supply Co., Charlotte, N. C.; Mrs. W. G. Hamner, Box 26, Gastonia, N. C.; Arthur W. Harris, 443 Stonewall St., S.W., Atlanta, Ga.; Henry H. Hersey, Norwood Place, Greenville, S. C.

N. Y. & N. J. LUBRICANT CO., 292 Madison Ave., New York, N. Y. Sou Office and Warehouse: 224 W. First St., Charlotte, N. C., Phone 3-7191. Falls L. Thomason, Sou. Agt., 224 W. First St., Charlotte, N. C.; W. C. Taylor, Box 1161, Greensboro, N. C.; F. W. Phillips, Box 782, Greenville, S. C.; Julian T. Pool, P. O. Box 316, LaGrange, Ga.; James E. McNeely, Jr., Box 82, Gastonia, N. C.; James A. Sorrell, Jr., Box 1062, Nashville 2, Tenn.

NORLANDER-YOUNG MACHINE CO., New Bedford, Mass. Sou. Plant, York Road, Gastonia, N. C.

NORTH AMERICAN ELECTRIC LAMP CO., 1014 Tyler St., St. Louis 6, Mo. Southeastern Repr.: Carl H. Henry Co., 170 Ellis St., N.E., Atlanta, Ga.

NORTH, INC., FRANK G., 1378 Murphy Ave., S.W., P. O. Box 123, Station "A," Phone Raymond 2196-2136, Atlanta, Ga.; Marietta, Ga., P. O. Box 92, Phone 250, Frank G. North, Pres. and Treas.; Mark W. Mayes, V.-Pres. Reprs.: Emile LeClair, Atlanta, Ga.; J. Cantey Alexander, Atlanta, Ga.; Raymond J. Payne, Carolinas, P. O. Box 6000, Charlotte 7, N. C., Phone 4-7331.

NUMO MACHINE & ENGINEERING CO., INC., Liberty Life Bldg., Charlotte, N. C. Ernest F. Culbreath, Pres.; Sou. Repr.: Floyd Isom, Station C, Box 164, Atlanta, Ga.; N. C. and Virginia Repr.: Walter S. Coleman, Box 722, Salisbury, N. C.

OLD DOMINION BOX CO., Charlotte, N. C.; Lynchburg, Va.

PABST SALES CO., 221 N. LaSalle St., Chicago 1, Ill. Sou. Repr.: C. H. Patrick, P. O. Box 300, Salisbury, N. C., Phone 1066. Sou. Warehouse, Textile Warehouse Co., Greenville, S. C.

PARKS-CRAMER CO., Plants at Fitchburg, Mass., and Charlotte, N. C. Atlanta Office, Bona Allen Bldg.

PEASE & CO., 119½ E. Fifth St., Charlotte, N. C.

PENICK & FORD, LTD., INC., 420 Lexington Ave., New York City; Cedar Rapids, Iowa. P. G. Wear, Sou. Sales Mgr., 806 Bona Allen Bldg., Atlanta 3, Ga.; J. H. Almand, Glenn M. Anderson, W. J. Kirby, Atlanta Office: C. T. Lassiter, Greensboro, N. C.; Guy L. Morrison, L. C. Harmon, Jr., 902 Montgomery Bldg., Spartanburg, S. C.; T. H. Nelson, Charlotte, N. C.; W. R. Brown, 1214 Liberty National Bank Bldg., Dallas, Tex. Stocks carried at convenient points.

PHILADELPHIA QUARTZ CO., Public Ledger Bldg., Philadelphia 6, Pa. Sou. Reprs.: F. Homer Bell, 2624 Forest Way, N.E., Atlanta 5, Ga.; Kenneth B. King, 1601 Seventh St., Charlotte, N. C.; Richard D. Greenway, 1356 Harding Place, Charlotte 3, N. C. Textile Distributors: Southern States Chemical Co., Atlanta, Ga.: Arnold Hoffman & Co., Inc., F. H. Ross & Co., Inc., Southern States Chemical Co., Charlotte, N. C.; Southern States Chemical Co., Greenville, S. C.; Southern Textile & Chemical Products Co., High Point, N. C.; Marlow-Van Loan Corp., High Point, N. C.; Taylor Salt & Chemical Co., Norfolk, Va.

PIEDMONT PROCESSING CO., Belmont, N. C.

PILOT LIFE INSURANCE CO. Jos. F. Freeman, Vice-President in Charge of Group Department, Greensboro, N. C.

PIONEER HEDDLE & REED CO., INC., 1374 Murphy Ave., S.W., P. O. Box 116, Station A, Telephone Raymond 2136, Atlanta, Ga. Frank G. North, Chairman of the Board; Mark W. Mayes, Pres. and Treas.; E. LeClair, Sales Mgr.; Glee B. Thompson, J. Cantey Alexander, Atlanta, Ga.; Raymond J. Payne, Carolina Repr., P. O. Box 6000, Charlotte 7, N. C., Tel. 4-7331.

PITTSBURGH PLATE GLASS CO., Columbia Chemical Div., Grant Bldg., Pittsburgh, Pa. Dist. Sales Office, 615 Johnston Bldg., Charlotte, N. C., James R. Simpson, Dist. Sales Mgr.

PNEUMAFIL CORP., 2516 Wilkinson Blvd., Charlotte, N. C.

PRECISION GEAR & MACHINE CO., 2001 N. Tryon St., Charlotte 2, N. C.

PRICE SPINDLE & FLYER CO., Camp Wadsworth, Spartanburg, S. C.

PROCTOR & SCHWARTZ, INC., 7th Ave. and Tabor Rd., Philadelphia 20, Pa. Sou. Office: Wilder Bldg., Charlotte, N. C.

RAGAN RING CO., Atlanta, Ga. N. C. Repr.: John H. Foard, Box 574, Newton, N. C.

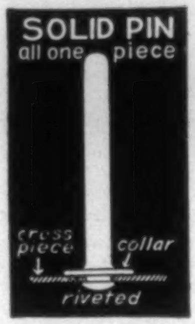
REINER, INC., ROBERT, 550-64 Gregory Ave., Weehawken, N. J. Sou. Repr.: John Klinck, 304 W. Forest Ave., North Augusta, S. C.

RHOADS & SONS, J. E., 35 N. Sixth St., Philadelphia 6, Pa. Sou. Office: J. E. Rhoads & Sons, 88 Forsyth St., S.W., Atlanta, Ga., P. O. Box 4305, C.

N. C. Collection UNC-CH Library

"WEAVE ROOM WILL" SAYS:

*"The Tougher The Job.
The Better This Solid
Pin Board Likes It"*



The secret of the success of the Davis Solid Pin Board is RIVETED CONSTRUCTION. Pins are riveted to flat strips with collar above and rivet head below. No chance of pins loosening or falling off!

Frank Davis MFG. CO., INC.
1139 MAIN STREET • PAWTUCKET, R. I.

Southern Representatives
JOHN P. BATSON, P. O. Box 841, Greenville, S. C.
R. E. L. HOLT, JR., P. O. Box 1474, Greensboro, N. C.

BOBBINS, CONES AND PIN BOARDS

WATSON and HART

Consultants for Civil, Electrical, Mechanical and Textile Engineering Problems

1001 E. Bessemer Ave., Greensboro, N. C.

Package Dyeing and Bleaching

ALL TYPE COLORS
ON COTTON YARNS

PIEDMONT PROCESSING CO., Belmont, N. C.

BIBERSTEIN & BOWLES, INC.

TEXTILE ARCHITECTS & ENGINEERS

CHARLOTTE 4, N. C. • Phone 2-5111

TILTON

Woven Endless Belts

Uniformly Strong

Eliminate vibration and transmit maximum power without slippage.

Constant Length

Practically all stretch and shrinkage taken out at factory.

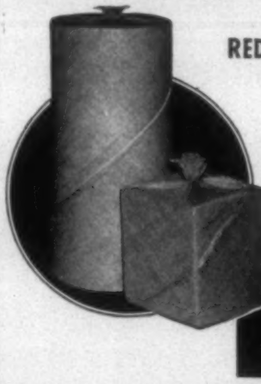
Flat and Round

Card Bands • Lickerin Belts • Doffer Belts • Cone Belts • Belts for Driving Flats.

Exclusive Agents in Virginia, the Carolinas and Georgia

Oliver D. Landis, Inc.

718 Queens Road Charlotte 7, North Carolina



REDUCES LABOR AND MATERIAL
COSTS IN PACKAGING

Bemis
TITE-FIT TUBING
Write for descriptive folder

BEMIS BRO. BAG CO.
5114 SECOND AVENUE
BROOKLYN ZONE 32, NEW YORK

RAY CHEMICAL COMPANY

Charlotte, N. C.

—offers—

Quality, Efficiency, and Economy

for every

SCOURING, BLEACHING, WETTING, DYEING
AND FINISHING PROBLEM

R. Mitchell, Mgr. Sou. Reprs.: J. Warren Mitchell, P. O. Box 1589, Greenville, S. C.; A. S. Jay, P. O. Box 687, Sylacauga, Ala.; J. T. Hoffman, P. O. Box 4305, Atlanta, Ga.; L. H. Schwoebel, 615 Roslyn Rd., Winston-Salem, N. C.; Textile Supply Co., 301 N. Market St., Dallas, Tex.

RICE DOBBY CHAIN CO., Millbury, Mass. Sou. Reprs.: R. E. L. Holt, Jr., Associates, P. O. Box 1474, Jefferson Bldg., Greensboro, N. C. (Ready to serve you.)

ROBERT & CO. ASSOCIATES, Atlanta, Ga.

ROY & SON CO., B. S., Worcester, Mass. Sou. Office and Supply Depot: 1623 N. Tryon St., Charlotte, N. C. Sou. Distributors: Odell Mill Supply Co., Greensboro, N. C.; Textile Mill Supply Co., Charlotte, N. C.; Textile Supply Co., Dallas, Tex.

ROYCE CHEMICAL CO., Carlton Hill, N. J. Sou. Repr.: Irving J. Royce, 2008 Belvedere Ave., Charlotte, N. C.

SACO-LOWELL SHOPS, 60 Batterymarch St., Boston, Mass. Sou. Office and Supply Depot, Charlotte, N. C., F. Robbins Lowe, Sou. Agt.; C. P. Clanton, Selling Agt.; Atlanta, Ga., Miles A. Comer and H. M. Walsh, Selling Agts.; Greenville, S. C., Charles S. Smart, Jr., Selling Agt.

SANDOZ CHEMICAL WORKS, INC., 61 Van Dam St., New York 13, N. Y. Sou. Office: 1510-12 Camden Rd., Charlotte, N. C., A. T. Hanes, Jr., Mgr.

SEYDEL-WOOLLEY & CO., 748 Rice St., N.W., Atlanta, Ga., Vasser Woolley, Pres. Reprs.: John R. Seydel, E. A. Scott, A. Pate, Atlanta, Ga.; W. L. Whisnant, Concord, N. C. Northern and Export Repr.: Standard Mill Supply Co., 1064-1090 Main St., Pawtucket, R. I. (conditioning machinery and penetrants only). Southwestern Reprs.: O. T. Daniel, Textile Supply Co., 301 N. Market St., Dallas, Tex.; Welling LaGrone, 13 W. Fairview Ave., Greenville, S. C.

SILVER KING FIBRE CORP., Westport, Mass., Hugh Neville, Jr., Pres. Va. and N. C. Repr.: Oliver D. Landis, Inc., 718 Queens Rd., Charlotte 7, N. C.; Ga., Ala. and Tenn. Repr.: J. W. Davis, 122 Dillingham St., Columbus, Ga.; S. C. Repr.: Ralph Gossett, 15 Augusta St., Greenville, S. C.

SINCLAIR REFINING CO., Dist. Office, 573 W. Peachtree St., Atlanta, Ga., F. W. Schwettmann, Mgr., Lubricating Sales; P. W. Goddard, Mgr., Industrial Oil Sales; G. R. Dyer, Mgr., National Acsounts Dept. State Offices: Atlanta, Ga., Birmingham, Ala., Jacksonville, Fla., Miami, Fla., Tampa, Fla., Columbia, S. C., Charlotte, N. C., Nashville, Tenn., Jackson, Miss. Industrial Lubricating Engineers: W. P. Camp, P. O. Box 988, Columbia F, S. C.; J. O. Holt, P. O. Box 5516, Raleigh, N. C.; L. M. Kay, 332 Eighth St., N.E., Atlanta, Ga.; G. C. Kimbrough, P. O. Box 338, Nashville, Tenn.; W. H. Lipscomb, Apt. 6, 111 Broadus Ave., Greenville, S. C.; R. C. Martens, Rt. 1, Elmore, Ala.; R. O. Miller, 15 Miller Ave., Concord, N. C.; C. C. Nix, P. O. Box 2111, Birmingham, Ala.; R. L. Parrish, 211 Claire Drive, Thomasville, Ga.; R. A. Smith, P. O. Box 1366, Knoxville, Tenn.; E. D. Watson, 218 Georgia Ave., Macon, Ga.

SIRRINE CO., J. E., Greenville, S. C.

SMITH & SON, E. E., Gastonia, N. C.

SMITH TEXTILE APRON CO., 1055 W. Franklin Ave., Gastonia, N. C.

SMITH, YATES D., 1055 W. Franklin Ave., Gastonia, N. C.

SOLVAY SALES DIVISION, ALLIED CHEMICAL & DYE CORP., 40 Rector St., New York, N. Y. Sou. Branch: 212 S. Tryon St., Charlotte, N. C.; Woodward Allen, Branch Mgr. H. W. Causey, Asst. Branch Mgr. Sou. Reprs.: Earl H. Walker, High Point, N. C.; Richard Hoyt, 1216 Edgewood Ave., Jacksonville, Fla.

SONOCO PRODUCTS CO., Hartsville, S. C.

SOUTHERN EQUIPMENT SALES CO. (N. C. Equipment Co.), Charlotte, N. C.

SOUTHERN LOOM REED MFG. CO., INC., Gaffney, S. C.

SOUTHERN SHUTTLES DIVISION, Steel Heddle Mfg. Co., Main Office and Plant, 2100 W. Allegheny Ave., Philadelphia, Pa. Greensboro Office, Guilford Bank Bldg., Box 1917, Greensboro, N. C., C. W. Cain, Mgr.; Henry P. Goodwin, Sales and Service. Greenville Office and Plant, 621 E. McBee Ave., Box 1899, Greenville, S. C., J. J. Kaufmann, Jr., V.-Pres. and Mgr. of Southern Divisions; Davis L. Batson and Sam Zimmerman, Jr., Sales and Service. Atlanta Office and Plant, 268 McDonough Blvd., Box 1496, Atlanta, Ga.; Southern Shuttles, a division of Steel Heddle Mfg. Co., 621 E. McBee Ave., Greenville, S. C., J. J. Kaufmann, Jr., Mgr.

SOUTHERN SPINDLE & FLYER CO., Charlotte, N. C.

SOUTHERN STANDARD MILL SUPPLY CO., 513 S. Tryon St., Charlotte, N. C. A. Benson Davis, V.-Pres.

STALEY MFG. CO., A. E., Decatur, Ill. Sou. Offices, 2000 Rhodes-Haverty Bldg., Atlanta, Ga. Wm. H. Randolph, Jr., Southeastern Mgr.; Charlotte, N. C., L. A. Dillon, Asst. Southeastern Mgr. Sou. Reprs.: George A. Dean, H. A. Mitchell, Montgomery Bldg., Spartanburg, S. C.; W. T. O'Steen, Greenville, S. C.; Walter P. Hope, Atlanta, Ga.; W. N. Dulaney, 12 Montevallo Lane, Birmingham, Ala.

STANLEY WORKS, THE, New Britain, Conn. Sales Reprs.: G. H. Little, Harrison Bldg., Room 414, 4 S. 15th St., Philadelphia, Pa., Tel. Rittenhouse 9977; G. R. Douglas, 707 Columbian Mutual Towers, Memphis 3, Tenn., Tel. 8-7117; M. A. Hawkins, 3813 General Taylor St., New Orleans 15, La., Tel. Magnolia 5353; H. C. Jones, care The Stanley Sales Co., 410 Candler Bldg., Atlanta, Ga., Tel. Lamar 4651; G. J. McLernon, 209 Hubbard St., San Antonio 2, Tex., Tel. Travis 3653; Charles J. Turpie, Jr., 1412 Scott Ave., Charlotte, N. C., Tel. 3-7015; J. A. Dickson, P. O. Box 390, 122 Bales Ave., Phone 9-2812, Chattanooga, Tenn.; T. P. West, Jr., 7 Mallard St., Greenville, S. C., Tel. 3515-M.

STEEL HEDDLE MFG. CO., Main Office and Plant, 2100 W. Allegheny Ave., Philadelphia, Pa. Greensboro Office, Guilford Bank Bldg., Box 1917, Greensboro, N. C., C. W. Cain, Mgr.; Henry P. Goodwin, Sales and Service, Greenville Office and Plant, 621 E. McBee Ave., Box 1899, Greenville, S. C., J. J. Kaufmann, Jr., V.-Pres. and Mgr. of Southern Divisions; Davis L. Batson and Sam Zimmerman, Jr., Sales and Service. Atlanta Office and Plant, 268 McDonough Blvd., Box 1496, Atlanta, Ga.; Southern Shuttles, a division of Steel Heddle Mfg. Co., 621 E. McBee Ave., Greenville, S. C., J. J. Kaufmann, Jr., Mgr.

STEIN, HALL & CO., INC., 285 Madison Ave., New York City. Charlotte Office: 224 W. Second St., Charlotte, N. C., F. W. Perry, P. O. Box 809, Mgr.; N. C. and Tenn. Repr.: W. S. Gilbert, Charlotte; S. C. Repr.: S. S. Hockridge, Charlotte. Atlanta Office: 364 Nelson St., S.W., Atlanta, Ga., E. D. Estes, 1257 Durand Dr., N.W., Mgr.; Ala. Repr.: J. E. Hensley, 3011 Avenue V, Birmingham, Ala.

STERLING RING TRAVELER CO., 101 Lindsay St., Fall River, Mass. Sou. Reprs.: H. B. Cabaniss, P. O. Box 188, Monroe, N. C.; M. H. Cranford, 135 Walnut St., Chester, S. C.; D. R. Ivester, Clarkesville, Ga.

STODGHILL & CO., Atlanta, Ga.

SUNRAY CO., Camp Croft Rd., Spartanburg, S. C. E. J. Eaddy, Pres.; H. O. Coddington, Gen. Mgr. Distributors: Wrenn Bros., Charlotte, N. C.; Wilkin & Matthews, Charlotte, N. C.; Coleman Co., Inc., Greenville, S. C.

TERRELL CO., INC., THE, Charlotte, N. C. E. A. Terrell, Pres., W. S. Terrell, Sales Mgr.

TEXAS CO., THE, New York, N. Y. Dist. Offices, Box 901, Norfolk, Va., and Box 1722, Atlanta, Ga. Bulk Plants and Warehouses in all principle cities. Lubrication Engineers: P. C. Bogart, Norfolk, Va.; W. H. Goebel, Roanoke, Va.; F. M. Edwards, Goldsboro, N. C.; W. P. Warner and C. W. Meadors, Charlotte, N. C.; J. S Leonard, Greenville, S. C.; F. G. Mitchell, Charleston, S. C.; L. C. Mitchum, Atlanta, Ga.; A. C. Keiser, Jr., Atlanta, Ga.; J. G. Myers, Birmingham, Ala.; J. W. Buchanan, Munsey Bldg., Baltimore, Md.; G. W. Wood, Charlotte, N. C.; J. H. Murfee, Greensboro, N. C.; G. B. Maupin, Greensboro, N. C.; W. T. Allen, Greensboro, N. C.; C. T. Hardy, Durham, N. C.

TEXTILE APRON CO., East Point, Ga.

TEXTILE SHOPS, THE, Spartanburg, S. C. E. J. Eaddy.

TIDE WATER ASSOCIATED OIL CO., 17 Battery Place, New York, N. Y. S. E. District Office: 3017 S. Blvd., Charlotte 3, N. C., K. M. Slocum, Dist. Mgr., Tel. Charlotte 2-3063. Sales Reprs.: R. C. Cook, 115 Orchard Rd., Richmond 21, Va., Tel. Richmond 84-0804; E. O. Eagle, 620 Joyner St., Greensboro, N. C., Tel. Greensboro 6291; G. B. Libby, P. O. Box 517, Taylors, S. C., Tel. Greenville 2-2800.

TODD-LONG PICKER APRON CO., Gastonia, N. C.

TODD-SMITH BANDING CO., INC., P. O. Box 116, Gastonia, N. C.

TRICO FUSE MFG. CO., 2948 N. Fifth St., Milwaukee, Wis. Sou. Reprs.: North Carolina and South Carolina: T. H. McKenzie, 2316 S. Blvd., P. O. Box 395, Charlotte, N. C.; Georgia: Southeast Engineering Co., P. O. Box 491, Jacksonville 1, Fla.; Alabama: Southeast Engineering Co., P. O. Box 491, Jacksonville 1, Fla.; Virginia: P. M. Simpson, 717 Byrd Park Court, Richmond 20, Va.; Tennessee: J. Ed Sharpe, care Dixie Sales Co., P. O. Box 1829, Knoxville, Tenn.; Texas: S. Gollob & Co., 1805 McDuffie St., Houston 6, Tex., and R. F. Hamilton & Associates, 2615 Cedar Spring, Dallas, Tex.; Louisiana: Trico Fuse Mfg. Co., Milwaukee, Wis. Distributors in the key cities of the South.

U S BOBBIN & SHUTTLE CO., Lawrence, Mass. Sou. Plants, Greenville, S. C.; Johnson City, Tenn. Sou. Reprs.: M. Ousley, P. O. Box 816, Greenville, S. C.; D. C. Ragan, High Point, N. C.; A. D. Roper, Johnson City, Tenn.

U. S. RING TRAVELER CO., 159 Aborn St., Providence, R. I. Sou. Office and Sales Room: 1503 Augusta Rd., Greenville, S. C. Sou. Reprs.: William P. Vaughan and Wm. H. Rose, P. O. Box 1048, Greenville, S. C.; Oliver B. Land, P. O. Box 1187, Athens, Ga.; Harold R. Fisher, P. O. Box 83, Concord, N. C.

UNIVERSAL WINDING CO., P. O. Box 1605, Providence, R. I. Sou. Offices, 819 Johnston Bldg., Charlotte, N. C.; Agts.: R. M. Mauldin and D. M. Dunlap; 903 Whitehead Bldg., Atlanta, Ga., Agt. J. W. Stribling.

VALENTINE CO., J. W., 612 S. Main St., Winston-Salem, N. C.; Box 278 Salem Station, Winston-Salem, N. C. T. Holt Haywood, Wachovia Bank & Trust Co. Bldg., Winston-Salem, N. C.

VEEDER-ROOT, INC., Hartford, Conn. Sou. Office, Room 231 W. Washington St., Greenville, S. C., H. V. Barker, Sou. Dist. Mgr.

VICTOR RING TRAVELER CO., Providence, R. I., with Sou. Office and Sales Room at 358-364 W. Main Ave., P. O. Box 842, Gastonia, N. C. Phone 247. Also W. L. Hudson, Box 1313, Columbus, Ga.

WAK INDUSTRIES, Charlotte, N. C.

WALLERSTEIN CO., INC., 180 Madison Ave., New York 16, N. Y.

WATSON & DESMOND, 218½ W. Fourth St., Charlotte, N. C., Clifton E. Watson and S. P. V. Desmond, P. O. Box 1954, Charlotte, N. C. Sou. Reprs.: Walter F. Daboll, 703 Jefferson Bldg., Greensboro, N. C.; John W. Littlefield, 810 Woodside Bldg., Greenville, S. C.; R. V. McPhail, Gastonia, N. C.

WATSON-WILLIAMS MFG. CO., Millbury, Mass. Sou. Reprs.: W. F. Daboll 703 Jefferson Bldg., Greensboro, N. C.; John W. Littlefield, 810 Woodside Bldg., Greenville, S. C.

WESTINGHOUSE ELECTRIC CORP. (LAMP DIVISION), Chamblee, Ga. R. A. Corvey, Dist. Mgr.; Walter R. McKinney, Branch Mgr., 2148 Highland St., Charlotte, N. C. Sales Reprs.: J. W. Johnston, 613 Mills St., Raleigh, N. C.; J. H. Vickery, 4332 Deveraux St., Columbia, S. C.

WEST POINT FOUNDRY & MACHINE CO., West Point, Ga.

WHEELER REFLECTOR CO., INC., 275 Congress St., Boston 10, Mass. Sou. Reprs.: Ernest Hail, 901-A Sul Ross St., Houston, Tex.; Marshall Whitman, Bona Allen Bldg., Atlanta, Ga.

WHITE & CO., 1440-44 S. Tryon St., Charlotte 3, N. C. G. A. White, Pres.

WHITIN MACHINE WORKS, Whitinsville, Mass. Sou. Office, Whitin Bldg., Charlotte, N. C., W. H. Porcher and R. I. Dalton, Mgrs.; 1317 Healey Bldg., Atlanta, Ga. Sou. Reprs.: M. J. Bentley and B. B. Peacock.

WHITINSVILLE SPINNING RING CO., Whitinsville, Mass. Sou. Repr.: William K. Shirley, Box 84, Ware Shoals, S. C.

WILKIN & MATTHEWS, 1504 E. Worthington Ave., Charlotte 3, N. C. Hugh Wilkin and John Matthews.

WOLF, JACQUES & CO., Passaic, N. J. Sou. Reprs.: C. R. Bruning, 302 N. Ridgeway Dr., Greensboro, N. C.; G. W. Searell, R. No. 15, Knoxville, Tenn.

N. C. Collection UNC-CH Library

"Standard" PORTABLE STYLE No. 1530 TAPE SEWING MACHINE

New portable Tape Sewing Machine for sewing Spinning and Twister tapes. Adapted to many other uses. Produces lock stitch and has accurate stitch adjuster. Also has REVERSE MOTION and self-releasing bobbin winder. Hand operated • Compact for small space operation • Adjustable seat • Swivel casters.

For complete details — write for descriptive folder.

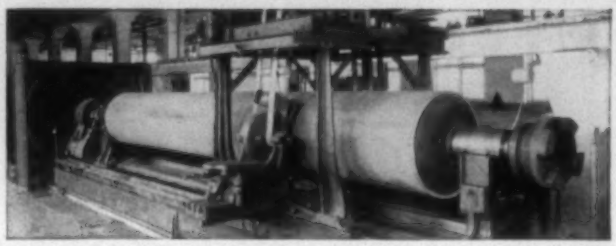
SERVICE QUALITY STAMILCO HONESTY RELIANCE ESTB. 1896

STANDARD MILL SUPPLY CO.

1064 Main St.
Pawtucket, R. I.

6708 Empire State Bldg.
New York, N. Y.

SOUTHERN STANDARD MILL SUPPLY CO.
Charlotte, N. C.



Controlled Accuracy
Insures Longer Service, Shorter Down Time
When you Invest in MANHATTAN ROLLS

This Manhattan machine, which grinds roll surfaces to within .002", is operated by men with a lifetime of experience on all kinds of rolls. Because of Manhattan's modern equipment and skilled craftsmanship, you can rely on Manhattan Rubber Covered Rolls to last longer, to lower your spoilage and down time costs.

Manhattan coverings adhere to metal by a special bonding process that cannot separate. Exclusive *Flexlastics* coverings will not oxidize or harden. Corrugating or checking are virtually eliminated. Density and resiliency are uniformly right. You can't go wrong with Manhattan Rolls.

"Better Service from a Southern Mill"

RUBBER LINED PIPE & FITTINGS   RUBBER & ASBESTOS PRODUCTS

RM **RAYBESTOS-MANHATTAN, INC.**
NORTH CHARLESTON, S. C.

CARECO ONE-PIECE FURNACE LINING
Reg. U.S. TRADE MARK Pat. Off.
For
REPAIRING
or
LINING

LONGER LASTING BOILER FURNACES

A PLASTIC LINING USED IN PLACE OF FIRE BRICK

"Boiler furnaces lined with CARECO last two to four times longer than those lined with fire brick. Write for quotation."

CAROLINA REFRACTORIES CO.
Hartsville, S. C.

RING HOLDERS
BOBBIN SHAFT GEARS
BOBBIN GEARS
SPINDLE SHAFT GEARS

KLUTTZ MACHINE & FOUNDRY CO., Inc.
P. O. Box 71   GASTONIA, N.C.   Tel. 5-3921

CAROLINA REEDS

"Made their way by the way they are made"

CAROLINA LOOM REED CO.
Phone 2-3037 GREENSBORO, N. C. P. O. Box 1536

BARNES SERVICE *Consulting Engineers*
TO THE TEXTILE INDUSTRY FOR OVER ⅓ CENTURY

Surveys—Reorganizations—New Plant Developments for Cotton, Wool, and Synthetic Yarn and Cloth Processing, Bleaching, Dyeing, Printing and Finishing.

★ Plant Appraisals ★ Mechanical and Operating Surveys — New Methods ★ Scheduling and Planning ★ Work Load Studies, Job Analysis and Evaluation, with Incentive Plans ★ Standard Cost Installations ★ Cost Control Methods

Labormeter Burden-meter Waste-meter

SERVING THE TEXTILE INDUSTRY OF THE WORLD BTA INC. FOR OVER A THIRD OF A CENTURY

BARNES TEXTILE ASSOCIATES, Inc.
10 HIGH STREET, BOSTON 10, MASS.
318 MONTGOMERY BLDG., SPARTANBURG, S. C.

N. C. Collection UNC-CH Library

CLASSIFIED ADVERTISING

Southern Standard Mill Supply Co.

NEW, REBUILT and USED TEXTILE MACHINERY and SUPPLIES

513 So. Tryon St.
Charlotte, N. C.
Phone 3-8841

1064-80 Main St., Pawtucket, R. I.

N. Y. Office: 6708 Empire State Bldg.

WE CAN OFFER THE FOLLOWING FROM STOCK:

1—Saco-Lowell Card Clothing Machine.
1—Yarn Conditioner and Motor.
2—Curtis & Marble 52" Inspecting Machines.
1—Taylor Scope Controller.
50M—10 x 5 Saco-Lowell Bobbins.
15M—9 x 4½ Whitin.
100M—8¾" Medium Whitin Quills.
20M—1¾" No. 2 New Draper Spinning Rings (original package).
130—Barber-Colman 26" Section Beams.
1—Barber-Colman Model "K" Tying In Machine.

WILSON LEWITH MACHINERY CORP.

Post Office Box 4100
Charlotte 1, N. C.
Phone 4-2403
Warehouse: Wilkinson Blvd.
Behind Barbeque Lodge

WANTED

COMBED YARN MILL SUPERINTENDENT

Piedmont Area. Small Mill, 15,000 Spindles.

College man, around 30 to 40 preferred.

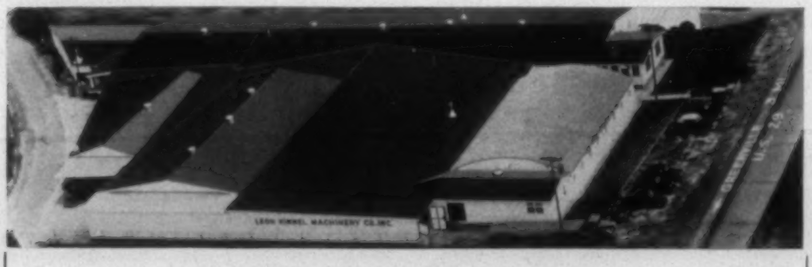
REPLY TO "AJ-8," CARE TEXTILE BULLETIN
P. O. Box 1225, Charlotte 1, N. C.

PALM OIL SOAP

For Sale—Straight Palm Oil Soap Powder at new low prices. Or will build to your specification. Packed in paper bags or steel drums—immediate shipment by truck or carload. Write for free sample, specifications and latest quotations.

GENERAL BIOCHEMICALS, INC.
48 Laboratory Park Chagrin Falls, Ohio

Wanted—Job as overseer spinning or carding, or both, in fine yarn mill. Experienced. Can furnish good references. Write "O.S.O," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.



LOOM SPECIALISTS

Largest Warehouse Stock In The South

WE BUY, SELL OR TRADE USED TEXTILE MACHINERY AND SUPPLIES

P. O. Box
1316

Phone
2-2721

LEON KIMMEL MACHINERY COMPANY

OFFICE AND WAREHOUSE: NEW SPARTANBURG HIGHWAY — GREENVILLE, S. C.

Specialists

We make and sell only the best in Leather Belting, Mill Strapping and Loop Pickers. Agents for the famous Dayton Pickers and Specialties.

GREENVILLE BELTING CO.

GREEENVILLE, S. C.

Manufacturers of Leather Belting and Strapping

Telephone 3-8911

PAUL B. EATON
Patent Attorney

1208 Johnston Bldg., Charlotte, N. C.
753 Munsey Bldg., Washington, D. C.

WANTED

Assistant Overseer of Card Room for large coarse goods mill in Alabama.

Write "C-N," care Textile Bulletin
P. O. Box 1225, Charlotte 1, N. C.

SALESMAN WANTED

Young man to cover Southern textile Mills for manufacturer long established line machine parts. We will train. Give your qualifications in first letter.

Write "S.C.," care Textile Bulletin,
P. O. Box 1225, Charlotte 1, N. C.

Use Textile Bulletin Classified Ads

ARE YOU IN NEED OF A MAN to take over major responsibilities? Young executive with excellent textile education and experience is desirous of investing capital and service in financially sound yarn and/or cloth mill. Reply "EST," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

Position Wanted—Job as Clothroom Overseer. Have been overseer in cloth room on print and combed broadcloth for past 20 years. Can furnish good references. Will appreciate an interview. Reply to "R.I.N.," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

Wanted—Position Overseer of Spinning or carding in carded or combed yarn mill. Have 21 years of experience as overseer. Married; 44 years old; sober and can furnish good references. Will come for interview. Reply to "ART," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

POSITION WANTED as Overseer of Weaving. Experienced on all types of Draper loom on cotton and spun rayon. 25 years in weaving department; 12 years as overseer; 2 years' college education. Perfectly sober and reliable. Age 41 and single. Reply to "F-218," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

AVAILABLE — Experienced Weaving and Slasher Overseer: 20 years experience on all types of Draper looms. Now employed, but would like to make a change. College education; married; have two children. 40 years of age; sober and reliable in every respect. Can furnish good references as to character and ability. Write "SL-3," care Textile Bulletin, P. O. Box 1225, Charlotte 1, N. C.

When in Charlotte
use our service

HERTZ DRIV-UR-SELF SYSTEM LICENSEE

CHARLOTTE CAR RENTAL SERVICE, INC.

411 North Tryon Street
Charlotte, N. C.
Phone 5-5969

EXCELLENT SITE FOR TEXTILE MILL

Ten acres just four miles from center of Charlotte, on Route 29. Only buildings on land are residence and several outer buildings. Priced low for quick sale.

Address P. O. Box 1264, Charlotte, N. C.

WANTED

Machine Shop to build and sell to the mills two textile inventions that I have in my possession. Both are a step forward and a good business for any shop. Write for particulars to

"Parts," care Textile Bulletin,
P. O. Box 1225, Charlotte 1, N. C.

DYER WANTED

Completely new modern plant in Virginia has opening for a Dyer experienced on Viscose and Acetate piece goods. State age, qualifications and salary expected.

Write "S-G 17," care Textile Bulletin,
P. O. Box 1225, Charlotte 1, N. C.

WANTED

A small modern spinning mill, 1,000-2,000 spindles, designed to produce carded yarns threes through eights. Would consider investment for part interest or purchase outright. Will take entire production.

Write "S.T.D.," care Textile Bulletin
P. O. Box 1225, Charlotte 1, N. C.

- If you want a new job, if you are seeking someone to fill a position, the classified advertising department of Textile Bulletin is ready to help. The classified section is read by both employees and employers.

- Firms having textile mill equipment for sale also find Textile Bulletin classified advertisements valuable in establishing business contacts.

FOR SALE

34 Parks-Cramer HD Humidifiers complete with motors, fans, drip pans (round and square) and a considerable amount of drain pipe 1″ to 3″.

LINN MILLS COMPANY

LANDIS, N. C.

HANDY SUBSCRIPTION BLANK

Please enter my subscription to TEXTILE BULLETIN for ______ (Check) one year at $1.50 or ______ (Check) three years at $3.00.

SIGNED____________________

POSITION____________________

FIRM____________________

ADDRESS____________________

(NOTE: In some cases four to six weeks are required in the processing of a new subscription before copies begin to reach you; please be patient.)

______REMITTANCE ENCLOSED; ______SEND BILL.
Please Send Money Order or Check as we cannot be responsible for cash.

Mail to TEXTILE BULLETIN, P. O. Box 1225, CHARLOTTE 1, N. C.

MEN WANTED—POSITIONS OPEN:

We can place worsted and woolen cloth mill superintendents and assistant superintendents; superintendent worsted finishing; overseer dry finishing worsteds; full-fashioned hosiery mill manager, superintendent, foremen and fixers; industrial engineer experienced needle industries (foreign); overseer worsted weaving; cotton spinning superintendent and weaving master (foreign); silk slashing foreman; velvet loom fixer; sewing room foreman; boss dyers cotton and rayon fabrics.

CHARLES P. RAYMOND SERVICE, Inc., 294 Washington St., Boston 8, Mass.
Over Fifty Years in business Telephones LIberty 2-6547 and LIberty 2-6548

Nutting MATERIAL HANDLING *Time Savers*

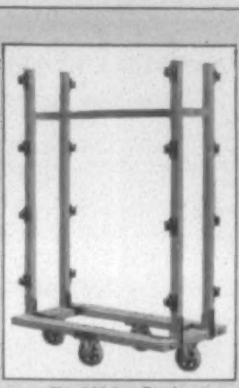


Fig. 310 Lap Truck

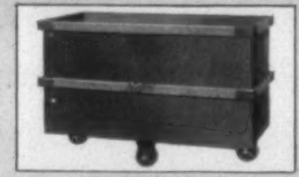


Fig. 870 Box Truck

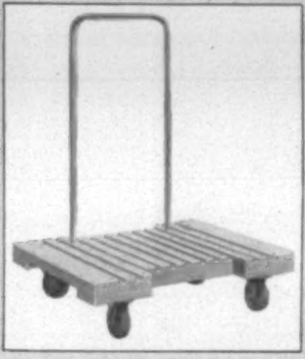


Fig. 360 Baling Press Truck

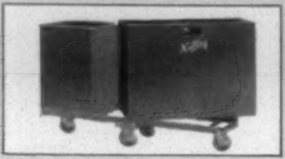


Fig. 304-A Doffing Box Truck

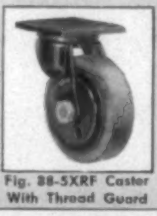


Fig. 88-5XRF Castor With Thread Guard

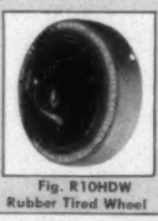


Fig. R10HDW Rubber Tired Wheel

TEXTILE INDUSTRY TRUCKS AND CASTERS FOR EVERY PURPOSE

Your production program can be speeded up . . . and your handling costs reduced . . . by a properly engineered materials-handling system. Why use trucks that only approximate your needs when there's a Nutting for every purpose? More than 1,000 truck designs have been developed in the Nutting line to suit each type of work.

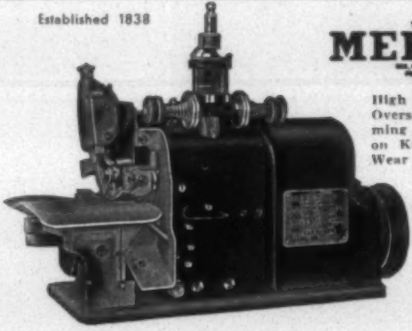
OUR COMPLETE LINE ALSO INCLUDES POWER TRUCKS, CONVEYORS AND TRAMRAIL

S. R. BROOKSHIRE
V. G. BROOKSHIRE

ENGINEERING SALES CO.

BUILDERS BUILDING
CHARLOTTE, N. C

Established 1838



TRADE MARK
MERROW

High Speed Overedging, Overseaming and Hemming Machines for Use on Knitted and Woven Wear of All Kinds.

Quality Results — High Production — Convenient Handling — Minimum Time Out for Adjustment and Repair — Low Upkeep Costs.

For Best Results Use a Machine Suitably Arranged for Your Work.

The MERROW MACHINE COMPANY

2802 Laurel Stret *Distributors* **Hartford 6, Conn.**
Hollister-Moreland Co., P. O. Box 721, Spartanburg, S. C.

INDUSTRIAL ENGINEERS

Specializing in Textiles for over *One-Third of a Century*

Ralph E. Loper Co.

GREENVILLE, S. C.
FALL RIVER, MASS.

- PAY ROLL CONTROLS
- WORK LOAD STUDIES
- COST SYSTEMS
- SPECIAL REPORTS
- COST REDUCTION SURVEYS

MOORESVILLE IRON WORKS

P. O. Box 246 **MOORESVILLE, N. C.** **Phone 49**

CASTINGS

Grey Iron, Bronze and Aluminum

TEXTILE MACHINERY PARTS

Loom Beams Our Specialty. **All metal Loom Beams with adjustable or stationary heads, also all types of Beams with wood barrels. Immediate delivery on Motor Pinions, Motor Pulleys, Sheave Pulleys, Cut Sprockets, Pick Wheels.**

Special Machines Qnoted On Upon Request

Specializing In
RENECKING STEEL ROLLS
Also We Manufacture
WATER ROLLS and FLUTED ROLLS

CREASMAN STEEL ROLLER MACHINE CO.

Wilkinson Blvd. Gastonia, N. C. P. O. Box 2416
Telephone 5-3312

N. C. Collection UNC-CH Library

Before Closing Down

— TEXTILE INDUSTRY HAPPENINGS AS THE MONTH ENDED —

COLLECTIVISM CRITICIZED

A growing concern over collectivism in government was expressed at the third annual Greenville County (S. C.) Industrial Relations Conference for Supervisors held Aug. 12-13 at Blythe Shoals, S. C., and attended by more than 100 textile leaders. Guy B. Arthur, personnel consultant of Toccoa, Ga., told the group that free enterprise is the basis of the nation's foundation and could not be changed without dire consequences. Mr. Arthur outlined the long established background of the economic system and spoke out against legislative changes toward collectivism through various socialized movements. John M. Holmes, retired Y. M. C. A. official, warned that "If we don't balance our budget in Washington at a time like this, we're headed for ruin." Mr. Holmes predicted that another depression is on the way if the budget is not balanced. "And when it comes, it will make the last one look like a picnic," he said. Thomas L. Carroll, assistant to the executive vice-president of the National Cotton Council, was another speaker. Panel discussions followed each address. W. H. McCall, president of the Greenville Textile Club, presided at the meeting.

THREE A. C. S. TEXTILE SYMPOSIA

The 116th national meeting of the American Chemical Society in Atlantic City, N. J., Sept. 18-23, will feature three symposia directly involving textile chemicals. They will concern fire retardency, preservation, and wrinkling and creasing. The session on flame retardency will be held under the Division of Industrial Engineering and Chemistry and will be presided over by Gustavus J. Esselen of Esselen Research Corp. Dr. Milton Harris, head of Harris Research Laboratories at Washington, D. C., will preside at the symposium considering the preservation of cellulose products, such as cotton, to be conducted under the society's Division of Cellulose Chemistry in co-operation with the National Research Council. The latest methods chemists have devised to prevent wrinkling and creasing will be considered at a symposium sponsored by the society's Division of Cellulose Chemistry in co-operation with the Divisions of Colloid Chemistry and Physical and Inorganic Chemistry. Dr. Herman F. Mark, head of the Instite of Polymer Research at the Polytechnic Institute of Brooklyn, will preside at this meeting.

PERSONAL NEWS

Following the elevation of Russell D. Newton to executive vice-president of Dan River Mills, Inc., Danville, Va., Raymond E. Henderson has been promoted to general superintendent of both Dan River divisions —Riverside and Schoolfield. Mr. Henderson previously was superintendent of the Schoolfield Division only. The superintendent of Schoolfield gray cloth operations is J. B. Cummings, and superintendent of Riverside gray operations is Roy Stevens. L. K. Fitzgerald, previously superintendent of both gray and finishing operations in the Riverside Division, now has the title of superintendent of finishing and designing. . . . Other Dan River operating officials are: Walter Vincent, superintendent of Nos. 1 and 2 plants; Cecil Elliott, superintendent of No. 3 Plant; William H. Spencer, superintendent of No. 4 Plant; and F. E. Bozeman, Jr. (previously Schoolfield maintenance superintendent), technical superintendent for all operations.

J. Hal Daughdrill, vice-president and general manager of Southern manufacturing operations for American Thread Co., is currently on a five-week European business and pleasure trip with Mrs. Daughdrill.

Charles B. Ordway of Burlington Mills Corp. has been named chairman of the Piedmont Section committee which will enter a paper in the annual intersectional contest which is to be a part of the American Association of Textile Chemists and Colorists convention at Atlantic City, N. J., Oct. 13-15. The presentation will be made by Prof. Joseph Lindsay, Jr., of Clemson College, a member of Mr. Ordway's committee. The contest judge representing the Piedmont Section will be Wyss Barker of National Aniline Division, Allied Chemical & Dye Corp. Other contest committee members include S. H. Williams of General Dyestuff Corp., James W. Grant of the Calco Chemical Division (American Cyanamid Co.), Clarence Hooper of Burlington Mills, Dr. Harley Y. Jennings of Dan River Mills, Linton C. Reynolds of Riegel Textile Corp. and V. B. Holland of Cannon Mills.

George K. Tate retired recently after 11 years as textile interviewer for the North Carolina Employment Service office at Gastonia, N. C. Mr. Tate, who has spent about 40 years in the textile industry, was for a number of years superintendent of the old McAden Mills at McAdenville, N. C.

Edward F. Bahan has been named president of Bahan Textile Machinery Co., Greenville, S. C. succeeding his father, the late William H. Bahan, who died recently of injuries suffered in an automobile accident. Mr. Bahan also will serve as treasurer of the firm. Other officers are Esther C. Bahan and Winifred Peters, vice-presidents, and L. E. Shooks, secretary.

Jesse T. Crawford, who has been manager of the Republic Cotton Mills division of J. P. Stevens & Co. at Great Falls, S. C., has been named director of carding and spinning research for the Stevens organization. . . . On Sept. 1, Carl A. Johnson, now general manager of Fisher Mfg. Co. at Fisherville, Mass., will succeed Mr. Crawford as manager at Great Falls.

James Riddle has been named superintendent of the rayon division of North Carolina Finishing Co., Yadkin, N. C. He formerly was assistant to James M. Myers, who continues as superintendent of the cotton division.

Dr. Jack Compton on Aug. 20 will assume the duties as head of the chemistry division at the Institute of Textile Technology, Charlottesville, Va. He was with B. F. Goodrich Co. in its textile department for four years, and later spent five years at the Rome, Ga., plant of Celanese Corp. of America.

OBITUARIES

Alphonso Lynn Ivey, 65, president and general counsel of Virginia-Carolina Chemical Corp., Richmond, Va., died Aug. 18 of a heart attack.

George Ivey, 77, an overseer in the Porterdale, Ga., plant of Bibb Mfg. Co. until his retirement several years ago, died Aug. 8. He is survived by a son and one granddaughter.

Charles F. McNally, 46, vice-president and credit manager for Meinhard-Greeff & Co., Inc., factoring concern, died Aug. 16 in New York City after suffering a heart attack at his office. He joined Meinhard-Greeff in 1942, and was well known in textile credit circles. Surviving are his widow and two sons.

MILL NEWS

GREENSBORO, N. C.—The mill village of Pomona Mfg. Co., now being sold piecemeal, was purchased last month by Domino Hosiery Mills, Inc., of Clemmons, N. C., for $250,000. The deed disclosed that only $100,000 was to be paid by Domino to Pomona. The remaining $150,000 was debt owed to Jefferson Standard Life Insurance Co., which Domino has agreed to pay. The mill building and machinery are reported to still be for sale.

TRION, GA.—Riegel Textile Corp. has agreed to furnish the labor for building an addition to the mess hall and recreation room at the Boy Scout camp near Rome, Ga.

BEMIS, TENN.—Bemis Cotton Mill is the industry of the month described in detail in the August issue of Tennessee State Planning Commission newsletter.

FLETCHER, N. C.—Construction work on the Fletcher plant of Cranston Print Works is now well along toward completion, with operations in the brick and concrete building scheduled to begin this Fall. According to John Gregory of Cranston, R. I., who will be resident manager of the new plant, initial activity will consist of operating four printing machines and about 70 persons will be employed. Eventually, some 400 workers will be hired for bleaching, printing and dyeing cotton goods. J. E. Sirrine Co. of Greenville, S. C., is the engineering firm in charge of construction.

GREENVILLE, S. C.—Southern Weaving Co., producer of narrow fabrics, has approved plans for the construction of a one-story addition to its plant for the expansion of the weaving department. The project is expected to cost approximately $100,000.

GREENVILLE, S. C.—Employees at Brandon Corp. on Aug. 18 rejected the Textile Workers Union of America (C. I. O.) as their bargaining agent by a majority of 27 votes. Out of 1,476 votes cast, 746 voted against the union, 719 voted in favor of the union and 11 votes were challenged. A total of 1,548 were eligible to ballot. Leo Fischer, representing the National Labor Relations Board, said the challenged votes could not change the result, so the C. I. O. cannot call for another election until the expiration of a year. In 1942 Brandon workers rejected the union by a three to one vote.

SPARTANBURG, S. C. — Bahnson Co. of Winston-Salem, N. C., has been awarded the contract for a humidity control system in the lower weave room of Spartan Mills No. 1 Plant. A total of $500,000 is being spent for air control at Spartan.

CLARKSVILLE, VA.—C. M. Guest & Sons of Greensboro, N. C., will erect a 50,000 square foot addition to the Clarksville Finishing Division of Colonial Mills, Inc. The space will be utilized for laboratory and dye kitchen facilities, as well as burling, mending and warehousing. Biberstein & Bowles of Charlotte, N. C., is the engineering firm.

BENNETTSVILLE, S. C.—Russell Mfg. Co., narrow fabric manufacturer of Middletown, Conn., has under consideration plans for locating a production unit here in a $150,000 building to be constructed soon by Marlboro Developing Corp.

MARTINSVILLE, VA.—E. I. du Pont de Nemours & Co., Inc., has announced plans to construct a club house on the golf course which is used by workers at its Martinsville nylon plant.

PROTECT YOUR FUTURE
BUY YOUR EXTRA SAVINGS BONDS NOW

N. C. Collection UNC-CH Library

Index to Advertising

Page

—A—

Acme Machine & Tool Co. 91
Air Engineering Co. 97
Allen Co., The 63
American Viscose Corp. 23
Arnold, Hoffman & Co., Inc. Back Cover
Ashworth Bros., Inc. 75

—B—

Bahnson Co., The 24
Baily & Co., Inc., Joshua L. 96
Barber-Colman Co. 14
Barkley Machine Works 99
Barnes Textile Associates, Inc. 105
Barreled Sunlight (U. S. Gutta Percha Paint Co.) 13
Bemis Bro. Bag Co. 103
Best & Co., Inc., Edward H. 43
Biberstein & Bowles, Inc. 103
Borne Scrymser Co. 45
Burkart-Schier Chemical Co. 101

—C—

Carolina Belting Co. 87
Carolina Loom Reed Co. 105
Carolina Refractories Co. 105
Carter Traveler Co. (Div. of A. B. Carter, Inc.) 95
Charlotte Car Rental Service, Inc. 107
Clinton Industries, Inc. 72
Cole Mfg. Co., R. D. 28
Commercial Factors Corp. 3
Crabb & Co., William 55
Creasman Steel Roller Machine Co. 108
Crompton & Knowles Loom Works 59
Curran & Barry 96

—D—

Dary Ring Traveler Co. 74
Davis Mfg. Co., Inc., Frank 103
Dayton Rubber Co., The 4 and 5
Dillard Paper Co. 38
Draper Corp. 2
Dronsfield Bros. 99

—E—

Eaton, Paul B. 106
Emmons Loom Harness Co. 19
Engineering Sales Co. 108

—F—

Ferguson Gear Co. 67
Fisher Mfg. Co. 101
Foster Machine Co. 17
Franklin Process Co. 29

—G—

Gastonia Brush Co. 101
Gastonia Mill Supply Co. 99
Gastonia Textile Sheet Metal Works, Inc. 10
General Biochemicals, Inc. 106
General Dyestuff Corp. 11
Gilman Paint Co. 93
Gossett Machine Works 53
Greensboro Loom Reed Co. 45, 63, 84, 90 and 92
Greenville Belting Co. 107
Gulf Oil Corp. of Pa. 21

—H—

H & B American Machine Co. 22
Hart Products Corp. 27
Henley Paper Co. 43
Houghton & Co., E. F. 56
Houghton Wool Co., The 72

—I—

Ideal Machine Co., Inc. 51
Industrial Electronics Corp. 28
Iselin-Jefferson Co., Inc. 97

—J—

Jenkins Metal Shops, Inc. 85
Johnson, Charles B. 35

—K—

Keever Starch Co. 82
Kimmel Machinery Co., Leon 106
Kluttz Machine & Foundry Co. 105

Page

—L—

Lambeth Rope Corp. 63
Landis, Inc., Oliver D. 47 and 103
Laurel Soap Mfg. Co., Inc. 70
Lewith Machinery Corp., Wilson 106
Loper, Ralph E. 108

—M—

Marquette Metal Products Co., The 25
Merrow Machine Co., The 108
Mooresville Iron Works 108
Monarch Elevator & Machine Co. 80
Moreland Chemical Co., Inc. 94

—N—

National Ring Traveler Co. 26
Neisler Mills Co., Inc. 96
New England Bobbin & Shuttle Co. 75
N. Y. & N. J. Lubricant Co. 64
Norlander-Young Machine Co. 47

—O—

Odom Machine Mfg. Corp. 67
Olney Paint Co. 93

—P—

Parks-Cramer Co. 79
Pease & Co., J. N. 91
Penick & Ford, Ltd., Inc. 99
Piedmont Processing Co. 103
Pike & Co., E. W. 31
Pilot Life Insurance Co. 86
Pneumafil Corp. 37
Precision Gear & Machine Co., Inc. Front Cover
Proctor & Schwartz, Inc. 12

—R—

Raybestos-Manhattan, Inc. (North Charleston Plant) 105
Ray Chemical Co. 103
Raymond Service, Inc., Chas. P. 107
Rice Dobby Chain Co. 45
Robert & Co., Associates 97
Roy & Son Co., B. S. 55

—S—

Saco-Lowell Shops 6
Seydel-Woolley & Co. 101
Sinclair Refining Co. 8 and 9
Sindar Corp. 70
Sipp-Eastwood Corp. 72
Sirrine Co., J. E. 72
Smith & Son, E. E. 79
Solvay Sales Div. Allied Chemical & Dye Corp. 70
Sonoco Products Co. 48
Southern Electric Service Co. 67
Southern Shuttles Div. (Steel Heddle Mfg. Co.) 30
Southern Spindle & Flyer Co. 55
Southern Standard Mill Supply Co. 106
Staley Sales Corp., A. E. 61
Standard Mill Supply 105
Stanley Works, The 83
Stein, Hall & Co., Inc. 16
Sterling Ring Traveler Co. 43
Stevens & Co., Inc., J. P. 96
Stewart Machine Co. 101
Stodghill & Co. 84

—T—

Terrell Co., Inc., The 7
Textile Apron Co. 28
Texize Chemicals, Inc. 76
Tide Water Associated Oil Co. 15
Truitt Mfg. Co. 81

—U—

U. S. Gutta Percha Paint Co. 13

—V—

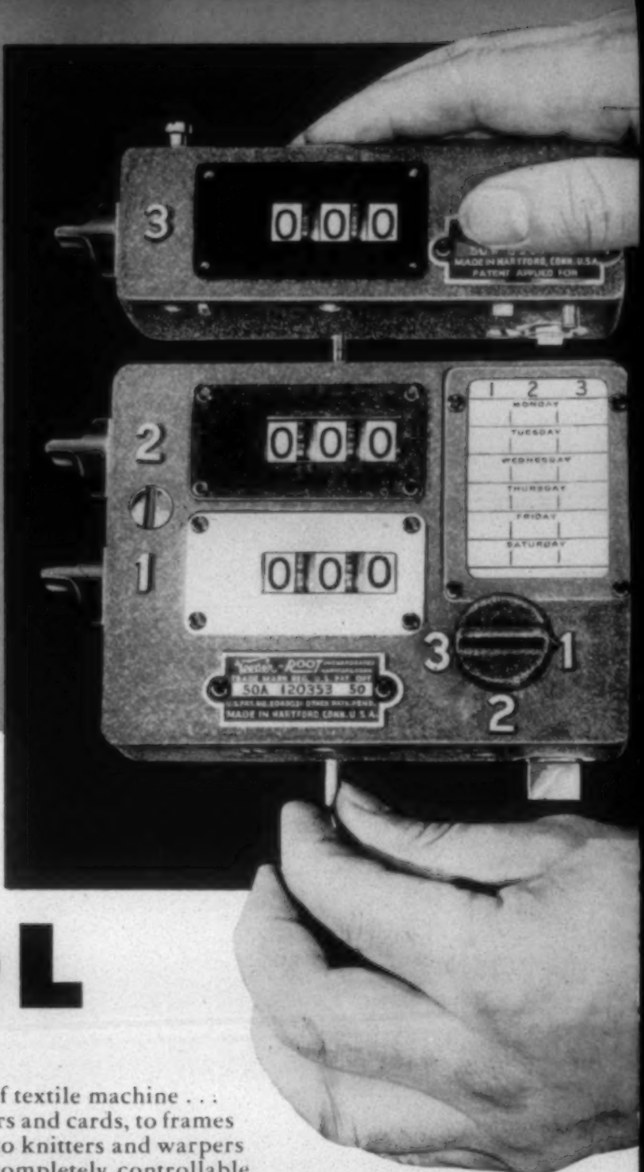
Valentine Co., J. W. 97
Vanderbilt Hotel 26
Veeder-Root, Inc. 111
Vogel Co., Joseph A. 26

—W—

WAK Industries, Inc. 86
Watson & Hart 103
Watson-Williams Mfg. Co. 47
West Point Foundry & Machine Co. 32 and 33
Whitinsville Spinning Ring Co. 101
Wilkin & Matthews 95

From HANDKERCHIEFS to HOSIERY

every type of
textile production
is kept under



VEEDER-ROOT COUNTROL

Every type of textile machine . . .
from braiders and cards, to frames
and looms, to knitters and warpers
. . . *all* are completely controllable,
cost-wise, when they operate under Veeder-Root *Count*rol.

Let the Veeder-Root engineer in your locality show you exactly what the newest improvements in 2-3 Convertible Pick, Hank, Yardage and Knitting Counters can mean to your profit-picture. And let him show you the full advantages of new Veeder-Root Counters like the Loom Cut Meter and the new "Dozens" Counter for glove and hosiery mills. Yes, you can always count on Veeder-Root to help you count up new profits! Just call the nearest Veeder-Root office.

VEEDER-ROOT INCORPORATED

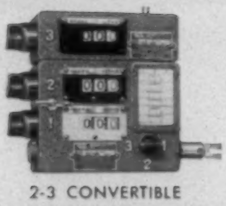
HARTFORD 2, CONNECTICUT — GREENVILLE, S. C.

"Counting House of the Textile Industry"

In Canada: Veeder-Root of Canada, Ltd., 955 St. James Street, Montreal 3. *In Great Britain:* Veeder-Root Ltd., Kilspindie Road, Dundee, Scotland.

World's Most Complete Line of Textile Counters . . .

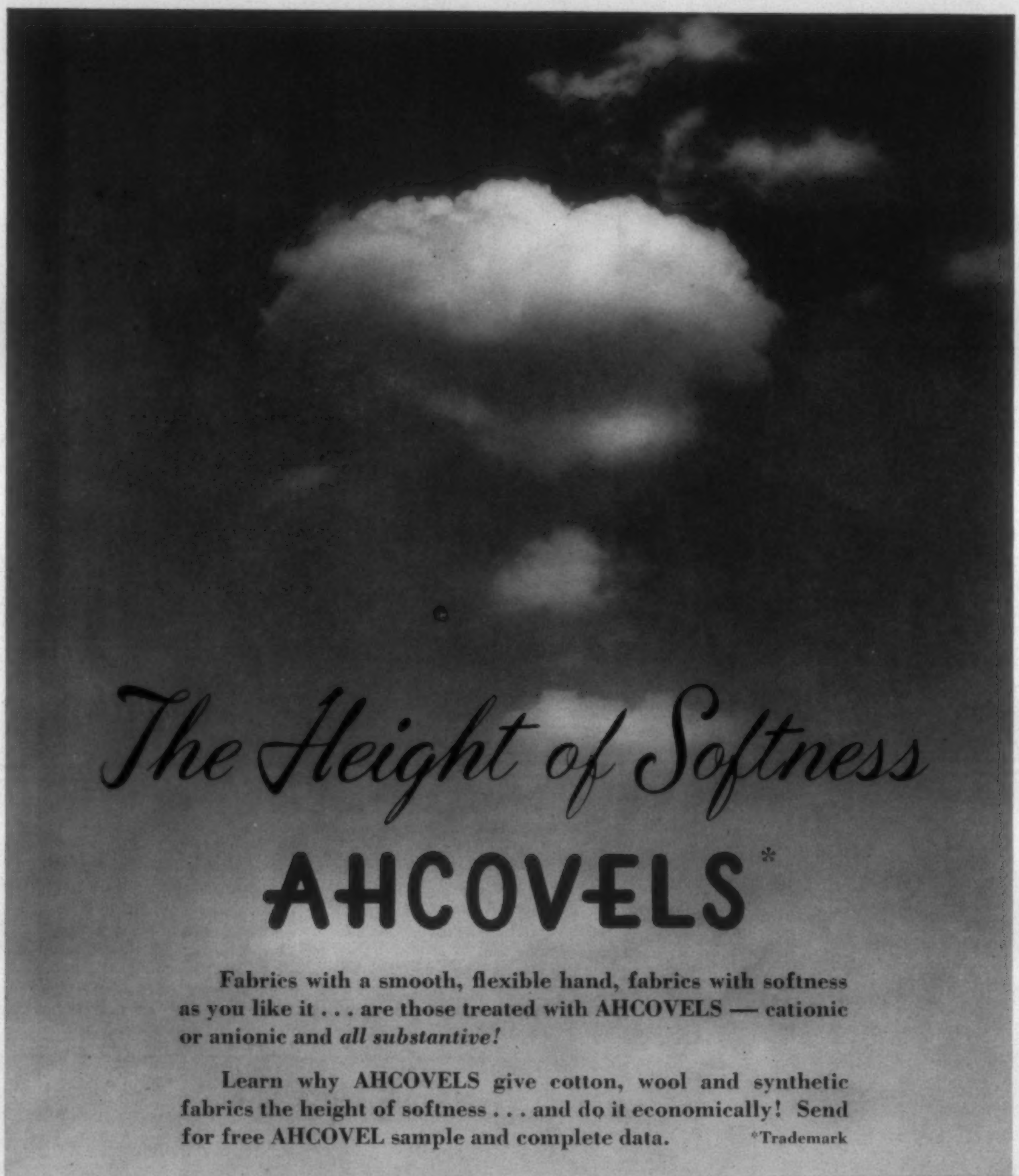
LOOM CUT-METERS



2-3 CONVERTIBLE
HANK COUNTERS

LINEAR COUNTERS

2-3 CONVERTIBLE
KNITTING COUNTERS



The Height of Softness

AHCOVELS*

Fabrics with a smooth, flexible hand, fabrics with softness as you like it . . . are those treated with AHCOVELS — cationic or anionic and *all substantive!*

Learn why AHCOVELS give cotton, wool and synthetic fabrics the height of softness . . . and do it economically! Send for free AHCOVEL sample and complete data.

*Trademark

ARNOLD, HOFFMAN & CO. INCORPORATED

PROVIDENCE, R. I.

Established 1815 — Plants at Dighton, Mass., Charlotte, N. C. and Cincinnati, Ohio

NEW YORK • PHILADELPHIA • CHARLOTTE • CINCINNATI